INSTRUCTIONAL COACHING TO SUPPORT GENERAL EDUCATION TEACHERS' SELF-EFFICACY IN TEACHING DUALLY IDENTIFIED STUDENTS

by
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Abstract

Dually identified students are defined as students who are English language learners and who have a disability. A 1-day peer assisted learning strategies (PALS) training workshop was conducted as part of the school's professional development summer institute. Following the 1-day PALS training workshop, two general education teachers engaged in six one-on-one coaching cycles over 12 weeks. The coaching cycles consisted of a pre-observation meeting, a lesson observation, and a debrief meeting. Main data sources were an efficacy survey, which was completed pre- and post-intervention, and two post-intervention, semi-structured, individual interviews. Other data sources were coaching cycle field notes, a researcher's journal, and student reading levels. The purpose of this study was to investigate how general education teachers, within a coaching cycle following a 1-day PALS training workshop, change their practice in teaching dually identified students. Another purpose of the study was to investigate how teachers describe changes to their teacher self-efficacy in teaching dually identified students after participating in the intervention and any relationship between teacher self-efficacy and dually identified student reading outcomes. The findings indicated that teacher practice and teacher self-efficacy in teaching dually identified students did change after participating in coaching cycles following a 1-day PALS training workshop. Both teachers reported that their teacher self-efficacy had increased. However, the changes reported by the two participants were, in part, distinct. One teacher reported that her teacher self-efficacy increased and that coaching cycles were very helpful in receiving feedback. Another teacher reported that while her teacher self-efficacy increased, she felt the coaching cycles were strained due to competing coaching cycles as

she was on a performance review plan. An implication of this study for schools to consider includes implementing specific feedback during coaching cycles and focusing on how teachers can be enabled to experience mastery in teaching dually identified students. Further research including teachers with more diverse and varied characteristics could extend the themes found in this study.

Keywords: dually identified students, teacher efficacy, instructional coaching, coaching cycles, PALS

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Dedication

This dissertation is dedicated to my family:

To my mother and father, who always believed in me and taught me the meaning of hard work and dedication.

To my children; may they always be lifelong learners and value education and hard work.

To my husband, who has provided me with unconditional support, love, and patience.

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Executive Summary

This qualitative study focuses on supporting general education teachers who work with dually identified students. For the purposes of this study, the term dually identified students refers to students who are both English language learners (ELLs) and have a disability. The dually identified students in the context under study are taught in an inclusive bilingual program, which means that they are simultaneously acquiring both English and Spanish languages. This study investigated how teachers viewed the effectiveness of a 1-day peer assisted learning strategies (PALS) training workshop followed by coaching cycles in terms of their self-efficacy and practice when working with dually identified students, with a particular focus on reading outcomes. I provided one-on-one instructional coaching cycles for two general education teachers on the implementation of PALS.

Context

The context for this study was a bilingual public charter school on the eastern coast of the United States that served approximately 540 pre-kindergarten- through fifth-grade students. The student population was 38% Caucasian, 33% Hispanic/Latino, 25% African American, and 4% Asian. Over 20% of the students were ELLs, with Spanish as their native language; 35% of the students were on free and reduced cost meals; and 6% received special education services. The school embraced the inclusion model for special education, which means the school sought to ensure that students in special education received as much instructional support as possible within the general education classroom and with non-dually identified peers. All general education classrooms included students with disabilities, such as autism spectrum disorder, specific learning disabilities, attention deficit hyperactivity disorder, and speech and language impairment.

Problem of Practice

Educational services often do not meet the cultural and linguistic requirements of students with special needs; as a result, dually identified students tend to perform below grade level expectations (Liasidou, 2013). General education teachers not only fail to understand the nature of disabilities but are also unaware of how the manifestations of students' disabilities are influenced by a child's linguistic and cultural background (Harry & Klingner, 2006; Liasidou, 2013). Teachers' understanding of learning disabilities and cultural and linguistic differences often leads to inappropriate referrals to special education programs, misdiagnoses of students, and inappropriate interventions (Artiles, Rueda, & Salazar, 2005). General education teachers can exhibit difficulties in adapting instruction to include students with disabilities and ELLs in general education classrooms and, in particular, understanding their own changing roles and responsibilities (Keaney, 2012; Liasidou, 2013). Teacher preparation programs leave teachers feeling ill-equipped to support students who may experience difficulties learning in the general curriculum (Florian, 2012; Greenleaf, Schoenbach, & Cziko, 2001). Underlying factors of dually identified students' underachievement include unclear and inconsistent policies, procedures, and practices; limitations in the overall school and classroom environment; family involvement; and cultural and linguistic understanding among teachers (Dixon, Yssel, McConnell, & Hardin, 2014). In the context under study, dually identified students consistently show the greatest disparity in reading achievement.

Theoretical Frameworks

This study is framed by Bandura's (1979) self-efficacy theory and Clarke and Hollingworth's (2002) interconnected model of professional growth, both of which explain how

teacher self-efficacy is influenced by, and influences, a teachers' environment and changes in practice.

Self-efficacy is one way in which change can occur within a person as self-efficacy explores how a person perceives their locus of control and influences the choices people are making (Bandura, 1977). Bandura (1979) suggests that self-efficacy is constructed from observational learning and social experiences. Self-efficacy is defined as "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performance" (Bandura, 1986, p. 391). There are four sources of efficacy beliefs: mastery experiences, vicarious experiences, verbal persuasion, and emotional arousal (Bandura, 1986). Mastery experiences are direct encounters with success through engagement in a behavior that brings about a desired outcome. Vicarious experiences are situations in which the learner is able to watch the teacher perform a task and witness the outcome of the action. Verbal persuasion occurs when a verbal reminder is given about skills that are being developed and encouragement that the individual can accomplish these tasks. Emotional arousal involves the release of hormones to prepare a person for action. These four sources of efficacy align well with the four domains of the interconnected model of professional growth by Clarke and Hollingsworth (2002).

The interconnected model of professional growth focuses on how teacher change is non-linear and individualized (Clarke & Hollingworth, 2002). The model suggests that teacher change occurs when reflection and enactment occur among four domains: the personal domain, the domain of practice, the domain of consequence, and the external domain. The personal domain refers to a teacher's beliefs, attitudes, and knowledge. The domain of practice refers to a teacher's openness or experience with new instructional strategies and ideas. The domain of

consequence, or salient outcomes, refers to the outcomes that the teacher experiences as a result of the domain of practice. The external domain includes outside resources and support such as professional development.

Purpose and Methodology

The purpose of this study was to determine the relationship between coaching cycles following a 1-day professional development workshop and changes in teacher practice regarding dually identified students. A secondary purpose was to determine the relationship between teacher self-efficacy and student reading levels. This qualitative study was guided by three research questions and two sub-questions:

1. How do teachers of dually identified students experience coaching cycles following a 1-day professional development workshop?
    1A. To what degree did the teachers participate with the coaching cycles?
2. How do teachers describe changes in their self-efficacy after coaching cycles following a 1-day professional development workshop?
    2A. What is the relationship between teacher self-efficacy and dually identified students' reading levels?
3. How do teachers describe changes in their practice after coaching cycles following a 1-day professional development workshop?

Research Design

This study used a descriptive case study approach. Descriptive case studies describe an intervention or phenomenon and the setting in which it occurred (Yin, 2003). A case study design is appropriate when asking how or why questions (Yin, 2003) and can provide a deep understanding of specific situations in a certain context (Schutt, 2012).

In this study, I described the relationship of coaching cycles following a 1-day PALS training workshop and teacher self-efficacy and changes in practice by examining teachers' experiences, observing lesson implementation, and analyzing narratives about their teacher self-efficacy. Qualitative data sources were teacher interviews, coaching cycle field notes, and a researcher's journal. Teacher Sense of Efficacy Scale surveys (Tschannen-Moran & Woolfolk Hoy, 2001) were completed by participants pre- and post-intervention to supplement the qualitative data collected about teacher self-efficacy. Student reading levels were used to determine student outcomes.

Intervention

The school held a 1-day PALS training workshop as part of a professional development week. I provided coaching cycles for two general education teachers, 2 months after the 1-day PALS training workshop, to target the reading achievement of dually identified students. The two participants, one third-grade general education teacher and one fourth-grade general education teacher, received six coaching cycles over 12 weeks between October 2016 and March 2017. The coaching cycles included three components: a pre-observation meeting, a lesson observation, and a debrief meeting. During the pre-observation meeting, I met with each teacher one-on-one. The teacher had the opportunity to ask questions about the upcoming lesson, discuss what she wanted to achieve, and request any support that might be needed. During the observation, I (as an instructional coach) took field notes and used the observational checklist on the PALS lessons that were implemented to note areas of strength and areas for potential growth. After the observation, a debrief meeting was scheduled during which the teacher was asked to reflect on the lesson, and I provided feedback.

Data Collection and Analysis

The qualitative data collected in this study were two post-intervention, semi-structured interviews, coaching cycle field notes, and the researcher's journal. The qualitative data were used to understand teachers' experience with coaching cycles, changes in practice, and teacher self-efficacy when working with ELLs with disabilities. Theoretical thematic analysis (Braun & Clarke, 2006) was used to analyze the qualitative data.

The quantitative data collected in this study were the Teacher's Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), administered pre- and post-intervention, and student reading levels, collected pre- and post-intervention. Due to the small sample size, descriptive statistics were used to analyze all quantitative data.

Findings

Both teachers noticed changes in their teacher self-efficacy in regard to dually identified students. This view was supported by the survey data, which showed an overall increase in teacher self-efficacy mean self-reported ratings. Even though both participants reported changes to their teacher self-efficacy, the stated reasons for their changes differed. One teacher felt a sense of responsibility to her dually identified students and was open to receiving feedback about expanding her knowledge about evidence-based practices. Conversely, the other teacher's beliefs about special education limited her role and practice. As such, it appears the beliefs that a teacher holds about her roles and responsibilities with dually identified students influences how she perceives the amount of impact she has on student learning.

The participants viewed the PALS-based coaching cycles as an intervention that improved their practice and student outcomes. Both teachers explained that their teaching practice changed due to engaging with PALS and coaching cycles as part of this study. The coaching cycles allowed each teacher to receive feedback on her teaching practice and a chance

to act upon the feedback within a structured setting. Additionally, dually identified students in both teachers' classes showed substantial gains in reading levels, and both teachers commented that the PALS program was instrumental in those gains as well as the gains in the students' confidence in reading.

The two participants reported differing experiences with the 1-day PALS training workshop that occurred prior to this intervention. One teacher reported that the 1-day PALS training workshop prepared her to teach the program and that the coaching cycles were very supportive of her practice in using the program with dually identified students. The other teacher, however, thought that the 1-day PALS training workshop could have been more interactive to foster learning and that there were outside barriers preventing her from teaching dually identified students that the workshop did not address. Even though the two teachers had somewhat different experiences, both teachers reported some degree of change regarding their instructional practice and self-efficacy as a result of engaging with the coaching cycles intervention. One participant had a difficult time attending and engaging with the coaching cycles, due to student behavior issues and having required additional coaching and meetings about her teaching performance.

Chapter 1

Factors Related to Teaching Dually Identified Students

In the last decade, student demographics have changed in the United States. With the increase in diversity, there has been a subsequent shift in students' cultural and linguistic backgrounds. The National Center for Education Statistics (2018) reported the number of English language learners (ELLs) as 9.4% in 2014–2015, which was about 4.6 million students, compared to 9.1% in 2004–2005, which was about 4.3 million students. The percentage of District of Columbia public school students who were considered ELL in 2015 was at least 10% (U.S. Department of Education, 2018). ELLs are those who do not have English as their first language and are learning to acquire the English language. Most schools assess a student's English competency through standardized testing and a parental survey. If the school determines that a student needs support to learn English, they will be placed in an ELL program. The type of programming depends on the district and school (Office of Civil Rights, 2015); bilingual education models and programming will be discussed in the review of the literature section.

Additionally, approximately 13% of all public school students are identified as receiving special education services (National Center for Education Statistics [NCES], 2015). Students can be referred for special education evaluation by school representatives or by the parents. Evaluation can include areas such as speech and language, motor skills, cognition, and academic achievement. Once the evaluation has been completed and data about the student's learning needs have been collected, a team of professionals determines whether the child meets criteria for special education services. If the child is found eligible for services, an individualized education plan (IEP) is created, as required by law (Zirkel, 2015). The IEP outlines the child's

present abilities; the child's specific academic, behavioral, or social goals; and the services required to support those goals (Zirkel, 2015).

IEPs require teachers to modify instruction and classroom environments to ensure that students with disabilities can access the general education curriculum. There has been a gradual increase in the amount of time students with disabilities spend in the general education classroom. For example, in 1995–1996, only 46% of students spent more than 80% in the general education classroom; in 2008–09, this figure had risen to 58% of students (Aron & Loprest, 2012). In a school context, inclusion means that students with disabilities are receiving the majority of the academic curriculum in the general education setting (Aron & Loprest, 2012; Idol, 2006).

There is a subset of students that have both special education needs and language acquisition needs. During 2014–2015, approximately 665,000 ELLs enrolled in public schools were also identified as students with disabilities (U.S. DOE, 2018). These students are often referred to as *dually identified students*. Sometimes, as in the context of the current study, dually identified students are taught in an inclusive bilingual program and are simultaneously acquiring both English and Spanish. Dually identified students underperform academically and are at a higher risk of dropping out of school (Obi, Obiakor, & Algozzine, 1999; Raj, 2015; Sheng, Sheng, & Anderson, 2011).

With changes in student demographics and policies, teachers' roles in the classroom are becoming more complex (Sheperd, Fowler, McCormick, Wilson, & Morgan, 2016), prompting the need to reevaluate teacher preparation programs and in-service professional development. Teacher preparation programs, or programs of study that lead to earning a degree in education and teacher certification, need to be examined to see if they are preparing teachers for the

classrooms they are about to enter (Boe, Shin, & Cook, 2007). After teachers enter the workforce, schools typically provide in-service professional development programs to address the changing needs of the education landscape. Greater understanding of professional development programs is needed to determine what constitutes effective teacher learning and subsequent student outcomes, as teacher self-efficacy can play a role in both teacher practice and student outcomes. Teacher self-efficacy can be defined as "the extent to which teachers believe that they have the capacity to affect student performance" (Ashton, 1984, p. 28).

This chapter will explore the role of general education teachers in the underachievement of teaching dually identified students. This chapter contains a statement of the problem, the theoretical framework, and, finally, the review of the literature regarding bilingual education, teacher preparation, teacher understanding of dually identified students, and teacher self-efficacy and professional development.

Problem of Practice

Educational services often do not meet the cultural and linguistic requirements of students with special needs; as a result, dually identified students tend to perform below grade level expectations (Liasidou, 2013). General education teachers not only fail to understand the nature of disabilities but are also unaware of how the manifestations of students' disabilities are influenced by a child's linguistic and cultural background (Harry & Klingner, 2006; Liasidou, 2013). Teachers' understanding of learning disabilities and cultural and linguistic differences often leads to inappropriate referrals to special education programs, misdiagnoses of students, and inappropriate interventions (Artiles, Rueda, & Salazar, 2005). General education teachers can exhibit difficulties in adapting instruction to include students with disabilities and ELLs in general education classrooms and, in particular, understanding their own changing roles and

responsibilities in relation to serving these students' needs (Keaney, 2012; Liasidou, 2013). Teacher preparation programs leave teachers feeling ill-equipped to support students who may experience difficulties learning in the general curriculum (Florian, 2012; Greenleaf, Schoenbach, & Cziko, 2001). Underlying factors of dually identified students' underachievement include unclear and inconsistent policies, procedures, and practices; along with limitations in the overall school and classroom environment; family involvement; and cultural and linguistic understanding among teachers (Dixon, Yssel, McConnell, & Hardin, 2014). In the context under study, dually identified students consistently show the greatest disparity in reading achievement.

Theoretical Framework

Bronfenbrenner's (1979) ecological theory focuses on the context in which students live and develop. Ecological systems theory consists of five environmental systems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The microsystem is the environment where a student spends the most time and has direct interaction with other people in that environment. For example, the classroom or the home would be a microsystem. The mesosystem is the linkages between the microsystems; for example, interactions between families and school personnel. The exosystem is the wider environment that impacts the student in their context but where the student may not have an active role. The exosystem could include federal laws that mandate what standards need to be taught in the classroom, for example. The macrosystem is the broader culture, which includes the beliefs and norms related to ethnicity or socioeconomic status. The chronosystem is sociohistorical or temporal and could include a child's transition to a new country.

Ecological systems theory (Bronfenbrenner, 1979) provides an approach to examining the factors that contribute to the problem of practice. Each system provides insight on how

underlying factors of the problem of practice is situated. The macrosystem can help to understand the larger societal attitudes toward ELLs and special education needs and how that might influence other systems. The federal laws of the Individuals with Disabilities Education Act (IDEA; 2004) and No Child Left Behind (NCLB; 2002) can be viewed at the exosystem level, which influences the microsystem. The microsystem helps to examine how teacher factors, such as self-efficacy and skills, can directly influence student outcomes.

The systems approach helps to understand how the underlying factors interact and provides a better understanding of the problem of practice. This literature review focuses on the role of the teacher in understanding how to best support dually identified students in inclusive contexts.

Review of the Literature

Teacher skills, teacher self-efficacy, and teacher preparation are factors that can influence the academic outcomes of dually identified students in a bilingual inclusive setting. These factors are widely discussed in the literature along with recognition of the challenges resulting from the difficulty in distinguishing between language acquisition and learning disabilities (e.g., Keaney, 2012; Klingner & Harry, 2006; Desimone & Parmar, 2006a; Desimone & Parmar, 2006b). In this section, I discuss bilingual education and history and policy, and examine the literature on how various teacher factors are related to academic achievement of dually identified students.

Language Acquisition and Bilingual Education

Language development for second language learners can happen in four stages. Genesse, Paradis, and Crago (2004) explain how students experience home language use, a nonverbal period, telegraphic and formulaic use, and productive language use. Home language use occurs when students use their first language, spoken at home, in the second language school

environment. The nonverbal period occurs when students are receptively accumulating the knowledge of the second language but do not produce many words verbally. Telegraphic and formulaic use occurs when students start to produce the second language but mostly speak in utterances and memorized phrases. Productive language use occurs when students start to formulate sentences from their own repertoire of vocabulary and understanding of grammar. As an individual develops language and increases verbal communication, he or she is able to interact with others within microsystem environments in new ways, such as through social or academic language.

Students' development of social language can be referred to as basic interpersonal communicative skills. Basic interpersonal skills can be thought of as students' ability to understand social interactions and converse in social exchanges (IRIS Center, 2011). Social language enables an individual to have more direct interaction with peers in the microsystem, as social language is usually acquired through interacting with others. Student's academic language, on the other hand, can be referred to as cognitive academic language proficiency, which means one is able to understand and use language in an academic setting (IRIS Center, 2011). Often social and academic language can be mistaken for each other, and students are perceived to be more capable than they truly are. Teachers need to be aware of how language is acquired to meet the needs of second language learners (Rodriguez, 2009).

As the number of non-native English speakers increases, schools need to be prepared to teach students who are linguistically diverse. Second language acquisition is a complex, multifaceted process (Lessow-Hurley, 2005). Students require exposure to the second language they seek to acquire and require an average of 5 to 7 years to learn that second language (Genesee et al., 2004). Language acquisition is a complex process of learning to speak, read, and

write a new language but also requires understanding of cultural context which requires comprehensive English language programs, such as bilingual programs in schools (Rodriguez, 2009). The choice of programming by the school is part of the exosystem and could influence how dually identified students are supported.

Bilingual education is one way in which schools are trying to meet the diverse needs of English language learners. Bilingual education can be referred to as an education taught in at least two languages (Garcia, 2009; Lessow-Hurley, 2005). Besides language acquisition and academic teaching, bilingual education also aims to culturally educate students toward becoming global and responsible citizens (Garcia, 2009). There are two main models of bilingual education. The first model of bilingual education is the additive model, in which a second language is added to a person's first language (Garcia, 2009). The second approach is the subtractive model, in which the first language fades out as a second language is introduced (Garcia, 2009). The different models inform different programs in bilingual education. An advantage of the additive model is that the home language is still developed as the student learns another language. The student can truly learn two languages—as opposed to the subtractive model, in which the home language is replaced. Most bilingual programs implemented are the subtractive model, which could be a contributing factor to lower achievement for dually identified students (Rodriguez, 2009).

Bilingual programs that embrace inclusive classrooms need teachers to be skilled not only in teaching students who are acquiring a second language, but also in understanding how disabilities impact access to the general education curriculum. Dually identified students have a unique set of difficulties: They are learning a new language and understanding the culture around them as they grapple with learning the content of the lessons (Genesee et al., 2004). Bilingual

teachers in inclusive classrooms must be aware of the learning needs of second language learners and the nature of the student's disability (Lessow-Hurley, 2005). Furthermore, teachers need to understand how the cultural and linguistic profile of a student interacts with their disability (Lessow-Hurley, 2005; Liasidou, 2013).

Teacher understanding of cultural and linguistic needs. There is not only value in understanding how language is acquired but also in understanding students' cultural needs. A teacher's understanding of cultural and linguistic needs is an example of how macrosystem and exosystem factors could contribute to lower achievement for dually identified students.

ELLs must learn the phonological system, morphological system, syntax, and semantics in both social and academic contexts (IRIS Center, 2011; Lessow-Hurley, 2005). Beyond the linguistic needs, students who are acquiring a second language also need to understand the surrounding cultural context (Lessow-Hurley, 2005). For example, students would need to understand the social norms and what is culturally accepted in their new environment, as both social norms and cultural context might be different from what they know. Understanding cultural context is an example of how the macrosystem plays a role in ELL programs at a school. Specifically, schools should consider how the various ELL program models can provide different levels of scaffolds, lesson modifications, and incorporate culturally relevant teaching to make learning accessible. The school's policy and choice of ELL program and teaching pedagogy is an example of how the exosystem plays a role in an individual's acquisition of language.

Culturally responsive pedagogy is one approach teachers could use to support the cultural context of dually identified students. Orosco and O'Connor (2014) presented a case study of a teacher and her students in a large elementary school in an urban southwestern school district. The researchers examined the role of culturally responsive pedagogy for teaching bilingual

special education through observations, interviews, and artifacts. The purpose of culturally responsive teaching is to "incorporate students' language, history, literature, and other cultural aspects of a particular racial or ethnic group to instructionally engage students' belonging to that group in authentic student-centered learning" (Orosco & O'Connor, 2014, p. 516). The findings revealed that by using culturally responsive teaching, the teacher was able to empower and affirm student self-worth and promote reading achievement by using collaborative, skills-based instruction and by activating students' prior knowledge. The teachers' perspectives showed that as part of the microsystem, teachers need to have cultural understanding, which might be influenced by the macrosystem.

Given the current demographics in the United States, teachers need to be more prepared to work with diverse learners. Chu and Garcia (2014) took a closer look at how factors such as professional development, personal characteristics (e.g., bilingualism), and teaching assignment might be related to culturally responsive teaching and teacher self-efficacy. The study was conducted in the southwestern United States with 344 special education teachers from three urban school districts who completed an online survey regarding teacher self-efficacy in culturally responsive teaching. Using a descriptive correlational research design, the researchers found that those who were certified in bilingual education and spoke more than one language had higher self-efficacy scores regarding perceived ability to teach students with cultural and linguistic differences compared to teachers who were monolingual. Teachers who felt they had adequate training in their teacher preparation programs scored higher on their self-efficacy scores in being able to teach culturally diverse students than those teachers who did not have training on diversity (Chu & Garcia, 2014). Meeting the needs of dually identified students is complex and requires an understanding of disabilities and sociocultural needs, which exists in both the

macrosystem and exosystem. The macrosystem can consist of cultural views and understanding, which could impact dually identified students. The exosystem includes the school's policy or approach to multiculturalism, which could impact how teachers approach culturally relevant pedagogy.

The use of native language and understanding culture and diversity can be beneficial for dually identified students' outcomes, explain the microsystem of school, and provide insights as to why the problem of practice exists. Teachers reported that being bilingual aided them in being able to communicate with families (Paneque & Rodriguez, 2009). This demonstrated how the mesosystem level plays a role in the problem of practice. The collaboration between home and school provides teachers with more understanding of the needs of the student. Teachers reported that there were benefits in using both the students' native language and English in the classroom (Paneque & Rodriguez, 2009). Teachers' decisions on language selection were based on students' needs to access the curriculum (Paneque & Rodriguez, 2009). Most special education teachers, however, are not bilingual and law does not require ELL teachers to speak another language (Chu & Garcia, 2014).

Teacher understanding of cultural and linguistic needs of dually identified is important in supporting the learning of the student, but it is also important in making appropriate referrals for special education. It is crucial for teachers to recognize and understand signs of error patterns that are common in language acquisition instead of mistaking them for communication or speech disorders (Rodriguez, 2009).

Learning disabilities and language acquisition needs. According to IDEA (2004), schools have a responsibility, as part of the Child Find program, in identifying students with disabilities (Aron & Loprest, 2012). Child Find requires states to identify and evaluate children

with disabilities as well as children who are suspected of having a disability. Teacher referrals, often the start of the special education process, are complicated by unclear state and district level referral policies as different states and districts interpret the law in a variety of ways (Keaney, 2012). This special education referral and evaluation process often results in misdiagnoses due to overreliance on standardized assessments that do not take cultural differences into account (Klingner & Harry, 2006). Examining the special education process revealed that schools, and often teachers, did not clearly differentiate between English acquisition needs and learning disabilities (Klinger & Harry, 2006). There is often confusion over the appropriateness of the referral for special education evaluation and use of assessments, resulting in an over-referral of ELLs and students not receiving appropriate services (Klingner & Harry, 2006).

Response to Intervention (RTI) is another method used to support all students' academic progress. Within RTI, schools have a multitiered intervention system in place to support students before they fall behind (Orosco & Klingner, 2010). RTI typically operates on a deficit model, where students have to fail before receiving help (Orosco & Klingner, 2010). The failure of the RTI process to clearly define and consider language fluency levels impacts the reliability of the identification process for students with language acquisition needs (Klingner, Artiles, & Barletta, 2006). Both special education and language needs may not be accurately evaluated, which affects whether the student receives appropriate support. There is a lack of teaching expertise and support to identify and distinguish between learning disabilities and language acquisition needs when students are dually identified (Orosco & Klingner, 2010). The misalignment of assessment and instruction within the RTI model shows that teachers are not prepared to differentiate for, or work with, ELLs (Orosco & Klingner, 2010).

Teachers are unable to distinguish between students with language acquisition needs and those with learning disabilities (Orosco & Klingner, 2010). A case study of an eighth-grade teacher of students with disabilities sought to understand students' needs based on language, disability, and culture and to illustrate the intense complexity that exists for general education teachers in supporting dually identified students (Garcia &Tyler, 2010). The authors noted that teachers need to be aware of how language needs are manifested and to recognize that some students may present as fluent speakers but still struggle when learning in a second language (Garcia & Tyler, 2010). These findings highlight the need for teachers to have better understanding of language acquisition and disabilities to be able to teach dually identified students.

There is a need to effectively and appropriately refer students for special education evaluation, to better support teachers who serve dually identified students, and to support students within the classroom and throughout the special education process (Garcia &Tyler, 2010; Klingner & Harry, 2006; Orosco & Klingner, 2010). The need for better referral systems and support for teachers to make appropriate referrals reflects how the exosystem is important in determining support for a student and how the linkage between the school procedures and process contribute to the problem of practice.

These studies demonstrate the complexity of trying to distinguish between language acquisition and learning disabilities and how the general education teacher plays a crucial role (Garcia & Tyler, 2010; Klingner & Harry, 2006; Orosco & Klingner, 2010). Even though the law mandates the identification of students with disabilities, the ability of schools to be able to do so accurately is questionable. The ability to accurately identify students for special education or ELL services contributes to students not receiving adequate support and succeeding

academically. These findings illuminate the problem of practice at both the microsystem and mesosystem levels and how laws enacted at the exosystem level may not align with actions in the microsystem.

History and Policy

There has been a shift in the political agenda over the past 20 years toward embracing inclusion (Leyser, Zieger, & Romi, 2011). In 1975, legislation was passed that guaranteed free and appropriate education to students with disabilities (Brizuela, 2011). This critical piece of legislation was amended in 1997 to form the Individual with Disabilities Education Act (IDEA; 2004), which provides the basis for special education programming in the United States. IDEA (2004) mandates that students with disabilities have access to a free public education that meets their needs (Brizuela, 2011). By law, all students with a disability that qualify for special education have an IEP that outlines appropriate goals, services, educational settings, and accommodations (Keaney, 2012). In addition, schools are mandated to educate students in the least restrictive environment, meaning that students with disabilities should be educated alongside their peers without disabilities to the greatest extent possible (Keaney, 2012). There is a continuum of placements for students receiving special education services, ranging from the least restrictive environment, such as general education classrooms, to the most restrictive setting, such as a segregated school (Keaney, 2012).

No Child Left Behind (NCLB; 2002), in conjunction with IDEA (2004), helps explain the evolution of the legislative context for inclusive special education. NCLB (2002) aimed to tighten accountability in education, which included special education and ELL populations. Title III of NCLB (2002), which provides funds intended to create and implement language instruction for ELLs, assists immigrants and ELLs in not only achieving grade-level standards, but also

acquiring proficiency in English (Bunch, 2011). NCLB, however, also explicitly holds teachers accountable for their students' standardized test scores, including students with disabilities and ELLs (Aron & Loprest, 2012; Buttaro, 2009).

The combination of IDEA (2004) and NCLB (2002) has prompted schools to become more inclusive in their approach to special education and ELLs, which has led to schools creating more inclusive classrooms (McCray & McHatton, 2011). According to the National Center for Education Statistics (2016), about 95% of students with disabilities in 2013 were served in regular public schools. Of the 95% of students with disabilities, about 62% were served in general education for over 80% of the school day (U.S. Department of Education, 2016). In 2004, 96% of students with disabilities were included in general education classrooms, with 52% of those students spending almost 80% of the school day in the general education classroom (McCray & McHatton, 2011). Researchers have debated the effectiveness of inclusion; however, inclusion promotes social justice, and students with disabilities should receive the same education as their peers, supported with additional services as necessary (Obiakor et al., 2012). The history, policy, and laws that govern education demonstrates how the macrosystem influences the access to the support needed for dually identified students.

With increases in inclusive practices and increases in students with linguistic and cultural differences, the question turns to whether general educators are sufficiently supported and equipped with the tools, skills, knowledge, and attitude to teach in this environment. Within the United States social and political context, researchers exploring inclusive education in bilingual or multilingual contexts have examined the importance of better understanding the challenges faced by general education teachers teaching in inclusive settings. As such, general educators need to be prepared and understand how to better serve these students in the inclusive and

bilingual context, as they present with a special set of needs.

Teacher Preparation

Teacher quality has been identified as a key factor to student learning (Johnson & Semmelroth, 2014; Jones & Brownell, 2014). General education teacher preparation programs are designed for teachers to build knowledge, understanding, attitudes, and skills but seem to be inefficient for real-world needs (Barrio & Combes, 2015; Cook, 2002; Desimone & Parmar, 2006a; Desimone & Parmar, 2006b; Florian, 2012; Greenleaf, 2001). Preservice teachers have expressed reservations over their abilities to support students with disabilities in an inclusive classroom due to lack of knowledge and experience (Barrio & Combes, 2015; Cook, 2004).

Preservice preparation programs for general education teachers often offer content-specific courses with limited connections to special education (Anderson, Smith, Olsen, & Algozzine, 2015). Preservice preparation programs that do offer a course in special education are often too broad and focus mostly on special education law instead of instructional strategies or evidence-based practices (Cook, 2002; Desimone & Parmar, 2006b). Teachers that attended preservice preparation programs with infused special education content and student teaching in special education classrooms viewed themselves as not being prepared to teach students with special education needs in the classroom (Anderson et al., 2015).

Some researchers have focused on preservice preparation programs that incorporate special education content and pedagogy throughout the general education coursework. Cook (2002), for example, examined the attitudes of 181 preservice general education teachers in a large midwestern university program that integrated special education content into a general education teacher preparation program. The study examined teachers' attitudes and their perceived strengths and weakness. Participants completed four surveys on different types of

disabilities: learning disabilities, developmental delays, multiple disabilities, and severe behavioral needs. The preservice teachers reported that their "teacher preparation experiences and instructional skills related to inclusion are inadequate" (Cook, 2002, p. 272). Another finding was that teachers' attitudes, strengths, and weaknesses regarding inclusion did not improve as they continued their teacher preparation. These findings illustrate the importance of teachers feeling prepared to teach an inclusive classroom, as this relates to how much they think they are able to teach students with disabilities. Evidence-based practices should be considered as a way to support teachers feeling prepared to teach in an inclusive classroom. Cook demonstrates that despite teachers having preservice training in special education, inservice professional development is still needed to help teachers meet the needs of students in inclusive settings.

Some researchers have focused on preservice preparation programs that incorporate special education content and pedagogy throughout the general education coursework. Cook (2002), for example, examined investigated general education mathematics teachers' beliefs and knowledge of students with disabilities. The authors used in-depth interviews, a 14-question survey, and classroom observations to examine teachers' understanding of inclusive environments, knowledge of instructional strategies, and levels of preparation to teach students with disabilities. The qualitative study took place at three large middle schools in small suburban New York districts. Each of the seven teachers had two to six students with disabilities in their class. All seven teachers reported that their teacher preparation program did not adequately prepare them for an inclusive classroom and did not provide sufficient exposure to instructional strategies for students with disabilities. Even though three out of seven teachers responded that they are "quite comfortable" or "very comfortable" about adapting lessons for students with learning disabilities, classroom observations showed that the teachers did very few or no lesson

adaptations for students with learning disabilities. Additionally, three teachers stated that they did not modify the curriculum for students with disabilities. None of the teachers graded the assignments of students with disabilities; special education teachers graded their work. Subsequently, the general education teachers had no data on which to gauge student outcomes, and they did not feel that they were primarily responsible for student progress (Desimone & Parmar, 2006a). This provides insight on how general education teachers may not have the skills or mindset to teach dually identified students and that schools may need to provide additional training.

In another study that investigated general education teachers' beliefs and perceived knowledge regarding students with learning disabilities, Desimone and Parmar (2006b) concluded that teacher preparation programs did not adequately prepare them for teaching students with disabilities in an inclusive setting. This nationwide mixed-methods study was conducted with 361 middle school mathematics teachers. Teachers completed a survey about prior preparation, level of current support from the school, and beliefs about inclusion and their ability to adapt instruction. Semi-structured interviews were conducted with 26 of the teachers. Teachers indicated insufficient understanding of pedagogical strategies, how to modify instruction, and how to individualize lesson plans for students with disabilities. Approximately 75% of the 361 teachers believed that their preparation programs did not prepare them to teach students with learning disabilities in an inclusive setting (Desimone & Parmar, 2006b). Furthermore, the investigators concluded that there was little or no support within the schools for teachers in inclusive contexts, demonstrating that professional development is crucial for general education teachers to be able to teach in an inclusive context.

In a more recent study, Barrio and Combes (2015) examined preservice general education teachers' concerns in being able to support students with special needs through the RTI model. RTI is a framework designed to support students at risk by using research-based interventions. The mixed method study was conducted with 100 preservice general education teachers who completed a 53-item questionnaire and participated in focus groups. Preservice teachers reported that they are most concerned with being able to implement RTI in their classrooms after their teacher preparation program (Barrio & Combes, 2015). Participants cited a lack of knowledge and experience as the reasons for feeling unprepared to implement RTI for at-risk students. This study demonstrates that the teacher preparation programs may not be sufficient for training teachers in addressing students with diverse needs. The feelings of being unprepared to teach students with diverse needs may linger after preservice teachers enter their own classrooms (Barrio & Combes, 2015).

In the next section, I examine how teacher self-efficacy connects to professional development and how both contribute to effective teaching of dually identified students in inclusive settings.

Teacher Self-efficacy and Professional Development

Teacher and student interaction exists within the microsystem. Teachers' direct interaction with the student can impact the student in a variety of ways. The quality of an individual teacher can make a difference in student academic outcomes (Coleman et al., 1966; Downey, von Hippel, & Broh, 2004), which includes teacher self-efficacy. Bandura (1986) explains self-efficacy as "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performance" (p. 391). Many scholars have cited Bandura's theory of self-efficacy and explained how it translates to teacher self-efficacy (e.g.,

Ashton, 1984; Chu & Garcia, 2014; Dixon et al., 2014; Leyser et al., 2011; Tschannen-Moran & Woolfolk Hoy, 2001). Teacher training influences teacher self-efficacy, which frames the importance of a teacher training relative to the problem of practice. Various studies have examined how different designs of professional development, such as coaching or professional learning communities, play a role in teacher self-efficacy (e.g., Cantrell & Callaway, 2008; Leyser et al., 2011); these studies will be described in Chapter 3, where intervention literature will be discussed. Professional learning communities can be defined as a small group of four to six teachers that teach the same grade level or content and involve collaborative planning (Chong & Kong, 2012).

Students whose teachers have higher efficacy usually scored higher in achievement outcomes (Muijs & Reynolds, 2015). Teachers with a higher level of efficacy tend to believe more in children's abilities to be successful, and also spend more time and effort on pedagogical practices (Shidler, 2009). Teachers with higher efficacy also demonstrate more persistence in working with students and are more open-minded about trying new ideas to meet students' needs (Shidler, 2009). Teachers responsible for dually identified students, however, displayed low levels of relevant skills and efficacy (Chu & Garcia, 2014; Rodriguez, 2009; Salend & Dorney, 1997). The success of dually identified students, therefore, is dependent upon teachers' instructional practices as well as their beliefs about teaching dually identified students.

As teachers often struggle to meet all students' needs (Dixon et al., 2014), it is important to consider how professional development can support teachers in meeting the needs of diverse learners. Teachers with more professional development about differentiation were more efficacious in differentiating instruction (Dixon et al., 2014). Furthermore, the higher a teacher's self-efficacy in their abilities to teach students effectively, the more willing the teacher was to

differentiate (Dixon et al., 2014). This also implies that without effective professional development, teachers could have lower self-efficacy toward differentiation that would likely impact learning opportunities for dually identified students.

Schools need to have a system that promotes collaboration and professional development to support a teacher's ability to accommodate dually identified students' needs (Paneque & Barbetta, 2006). Special education teachers ($N = 202$) completed a researcher-designed inventory to understand teachers' self-efficacy relative to teaching dually identified students. Teachers reported overall high efficacy in teaching but were less efficacious in accommodating the needs of culturally and linguistically diverse students (Paneque & Barbetta, 2006). The authors identified cultural and linguistic awareness as an area of potential growth for teachers and suggested further professional development was needed to address teacher self-efficacy in addressing diverse students. These results provided insight as to how professional development, such as coaching, could play a role in improving the microsystem context, specifically teachers' self-efficacy, for dually identified students.

One study points to how merely providing professional development to teachers may not be sufficient and other forms of additional support, such as coaching, should be considered to build teachers' self-efficacy in teaching dually identified students (Abernathy-Dyer, Ortlieb, and Cheek, 2013). Four first-grade teachers, two treatment and two control, responded to open-ended questionnaires and were observed to determine the relationship between teacher self-efficacy and implementation of a new curriculum (Abernathy-Dyer et al., 2013). The treatment group received instruction on implementing the Read First program. Professional development followed by coaching and including teachers in the planning and implementation of a new curriculum can have positive outcomes on teacher self-efficacy for reading. Teachers found the

formal training less helpful and found coaching to be a useful way to learn (Abernathy-Dyer et al., 2013). Even though this study focused on general education teachers, the findings can provide perspective on how teacher self-efficacy plays a role in students' learning.

Teacher self-efficacy plays a role in how the teacher approaches teaching students (Downey et al., 2004), particularly dually identified students, and higher teacher self-efficacy could promote student achievement (Abernathy-Dyer et al., 2013; Dixon et al., 2014). These studies demonstrate that teacher self-efficacy seems to be linked to professional development and insufficient professional development could influence lower teacher self-efficacy for teaching students with diverse needs. Lower teacher self-efficacy could be related to lower student achievement outcomes which is a factor to consider for the problem of practice.

Summary

The ecological system theory frames how the different factors related to the problem of practice are interconnected. Teacher understanding of how to distinguish language acquisition needs from disability is complex, and the general education teacher is a vital stakeholder from the very beginning of a student's academic learning (Obiakor et al., 2012). The referral process for special education, part of the exosystem, can be dependent of teacher understanding of disabilities and language acquisition, which exists in the microsystem (Cook, 2002; Chu & Garcia, 2014). For the referral process to adequately identify students for services, teachers have to be able to make appropriate referrals, which also depends on support from the school and clarity of school process and policy (Klingner & Harry, 2006; Orosco & Klingner, 2010).

Teachers provision of culturally relevant teaching is part of supporting the needs of dually identified students; however, teachers often struggle with understanding the needs of culturally and linguistically diverse students (Chu & Garcia, 2014). Teachers' instructional

practices, such as culturally relevant teaching, directly influence dually identified students as part of the microsystem. Teacher preparation programs may not be preparing teachers to address diverse learners' needs in such ways, which exists in the exosystem. Adequate teacher preparation is a factor to consider for the achievement disparities between dually identified students and non-dually identified peers.

Teacher self-efficacy, existing in the microsystem but influenced by the macrosystem, is another factor to consider. Teacher self-efficacy has been linked to student outcomes, and teachers have reported low teacher self-efficacy in regard to teaching dually identified students. Teacher self-efficacy is integral to understanding how teachers view their abilities and how professional development experience can be used to understand and support teachers' knowledge, skills, and efficacy related to teaching dually identified students in inclusive settings (Abernathy-Dyer et al., 2013; Dixon et al., 2014; Leyser et al., 2011).

This review of the literature examined diverse student populations (e.g., various learner needs, demographics, subject areas), and demonstrates how both qualitative and quantitative data can contribute to the identification of teacher self-efficacy and teacher understanding of students' cultural and linguistic needs. Factors related to teaching dually identified students in inclusive settings include models of education, teacher preparation programs, teachers' understanding of students' cultural and linguistic needs, and teacher self-efficacy and professional development. Further research is needed to better understand the difference between learning disability and language acquisition needs and how teachers can be supported to differentiate the most appropriate strategies for each student.

The next chapter presents a needs assessment study conducted at a bilingual English-Spanish public charter school. Based on a review of the literature, the needs assessment

examined the amount and quality of supports given to teachers for teaching dually identified students, the role of teacher self-efficacy, and the specific professional development needs of the context under study.

Chapter 2

Needs Assessment Study: Teaching Dually Identified Students

Teachers responsible for dually identified students show lower levels of relevant skills and efficacy (Chu & Garcia, 2014; Rodriguez, 2009; Salend & Dorney, 1997). Teacher self-efficacy is viewed as the teacher's own perceptions of their abilities in being able to achieve desired outcomes of student learning (Ashton, 1984; Tschannen-Moran & Woolfolk Hoy, 2001). Self-efficacy is important to consider as it influences how teachers instruct their students (Downey et al., 2004). Professional development can be a method to support teacher self-efficacy related to teaching dually identified students in inclusive settings (Abernathy-Dyer et al., 2013; Dixon et al., 2014; Leyser et al., 2011).

As lower teacher self-efficacy is related to lower student achievement (Tschannen-Moran & Woolfolk Hoy, 2001), it is important to examine teacher efficacy when trying to understand the problem of practice. Further, it is important to understand how the relationship between professional development and teacher self-efficacy supports teachers to improve reading outcomes for dually identified students. In this context, the focus of this needs assessment study was to explore how teacher self-efficacy, professional development opportunities, and student achievement, specifically the reading achievement levels (i.e., accuracy and comprehension) of dually identified students in the inclusive environment of pre-kindergarten to third grade at a bilingual public charter school.

Context of the Study

The professional setting for this needs assessment study was a bilingual public charter school in the eastern United States that served approximately 400 pre-kindergarten to third-grade

students. There were four classes per grade, with classes no larger than 23 students. The school also provided before- and after-school care.

The faculty and staff included 36 classroom teachers, both lead teachers and teaching fellows, and three teaching associates. The lead teacher had primary responsibility for the 18 to 23 students in the class. Each pre-kindergarten, kindergarten, and first-grade class had a teaching fellow in addition to the lead teacher. Teaching fellows were part of an internal program that supported their endeavors to become certified teachers. Teaching fellows did not have whole-class responsibilities but taught lessons with guidance from lead teachers. The target population of this needs assessment study was faculty and staff involved with the general education classrooms: classroom teachers (i.e., lead teachers and teaching fellows), instructional coaches, and administration. Teaching associates, formerly called teachers' aides, acted as assistants to the teachers in the pre-kindergarten classes but were excluded from this study.

In addition to classroom teachers, the school had four special education teachers, four instructional coaches, an executive director, and a principal. The special education teachers worked with students with disabilities, fulfilling specialized instructional hours based on students' IEPs. General education teachers sought out the special education teachers, as needed, for support on how to meet the dually identified students' needs in an inclusive environment. Each instructional coach (i.e., biliteracy instructional guide, special education coordinator, curriculum designer, director of inclusion) worked with all teachers as well as created and facilitated professional development specific to his or her role. The executive director and principal were founding members of the school and played important roles in building overall school climate. I was the director of special education at the time of the needs assessment study,

which was a nonevaluative role responsible for monitoring compliance with special education law.

The school had a two-pronged mission of (1) biliteracy in English and Spanish, using a dual immersion model, and (2) environmental sustainability. In dual immersion programs, students learn the curriculum through both their home language and the new language. The school taught Spanish not just as a language, but also used it as mode of instruction. Pre-kindergarten and kindergarten teachers led all subject areas in Spanish and first- through third-grade teachers led all subject areas by alternating between English and Spanish on different days. For example, students were taught using Spanish on Mondays and Thursdays and using English on Tuesdays and Fridays. Students alternated between being taught in Spanish and English every other Wednesday. The school mission also focused on being environmentally friendly; curricular themes were based on learning about how to protect the environment.

The school embraced the inclusion model for special education, which means that the school tried to ensure students in special education received as much instructional support as possible within the general education classroom and with nondisabled peers. All general education classrooms, therefore, included students with disabilities such as autism spectrum disorder, specific learning disabilities, attention deficit hyperactivity disorder, and speech and language impairments. Dually identified students are typically diagnosed with a specific learning disability, such as dyslexia. Specific learning disabilities are a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. (IDEA, 2004, p. 11)

Students at this school were evaluated for special education services and language needs through a two-part assessment. First, students were evaluated through standardized assessments, such as the Wechsler Intelligence Scale for Children (Wechsler, 2003), to determine cognitive and academic needs. Second, students were assessed for language proficiency through the Assessing Comprehension and Communication in English State-to-State for English Language Learners 2.0 (WIDA, 2015). At the time of the needs assessment study, all students in this context that qualified for special education services also qualified to receive language support in English, Spanish, or both languages. These dually identified students were achieving lower academically, specifically in reading, compared to their peers without disabilities.

Statement of Purpose

The purposes of this needs assessment study were: (1) to determine any discrepancies in the reading achievement levels of dually identified students in comparison to non-dually identified students and (2) to understand teacher self-efficacy and the types of support provided to teachers of dually identified students. The following questions guided this needs assessment study:

1. What is the current reading level of dually identified students compared to that of non-dually identified students?
2. How do teachers perceive their efficacy in teaching reading to dually identified students in inclusive and bilingual classrooms?
3. What support is provided to teachers of dually identified students in an inclusive environment, and what future support could be provided?

Method

In this section, I describe the participants, measures, data collection, and data analysis. The research design was a convergent mixed method approach (Creswell & Plano Clark, 2011). The mixed method design was chosen to capture different perspectives from qualitative and quantitative sources to answer the research questions. Qualitative and quantitative data were collected at the same time and the data were interpreted separately. The findings were compared and triangulated to construct a more complete understanding (Creswell & Plano Clark, 2011).

Participants

The needs assessment study participants included school faculty as well as students' archival data. An email with a consent letter was sent to classroom teachers and instructional coaches to explain the purpose of the study (see Appendix A). This email was sent out to potential participants after a schoolwide presentation explaining the needs assessment study.

The faculty participants were 29 classroom teachers, four instructional coaches, and two administrators, which met the requirement of 30 participants for basic statistical analysis (O'Leary, 2014). Of the 29 classroom teachers, 23 were female and six were male. The racial composition was 41% Caucasian, 45% Hispanic, and 14% African American. All of the classroom teachers held either a bachelor's (62%) or master's degree (38%). Only 59% of classroom teachers held either state, out-of-state, or international teacher certification; 41% of the classroom teachers were uncertified. Fifty-one percent of the classroom teachers had not had training in special education, and 38% had not had training in language acquisition. Please refer to Table 2.1 for more details on teacher demographics.

The instructional coaches were females between 30 and 35 years old. Two were Caucasian, one was Asian, and one Hispanic/Latina. All instructional coaches had master's degrees, were certified in elementary education, and had been in education for at least 7 years.

The executive director was a bilingual Caucasian female in her 40s with a non-education master's degree and a background in nonprofit organizations. The principal was a bilingual Hispanic female in her 40s with a master's degree and over 10 years of experience in education.

Table 2.1

Classroom Teacher Demographics

Demographics	Percent
Gender	
Female	79%
Male	21%
Age	
20-25	7%
25-30	49%
30-35	31%
35-40	10%
40-45	3%
Degree	
Bachelor's	62%
Master's	38%
Teacher certification	
Yes	59%
No	41%
Race	
Caucasian	41%
African American	14%
Hispanic	45%

Student participants (n = 218) included any Grades K–3 student who had completed both the English and Spanish versions of the reading assessment. The student population was 38% Caucasian, 33% Hispanic/Latino, 25% African American, and 4% Asian. Over 20% of the students were ELLs, with Spanish as their native language; 35% of the students were on free and reduced cost meals; and 6% received special education services. Thirteen of the 218 students were considered dually identified, according to school records.

Measures

The needs assessment study focused on teacher self-efficacy and professional development. Student reading level was also targeted, as the literature on teacher self-efficacy and professional development focused on how student outcomes might be influenced.

Questionnaires. Classroom teachers completed three questionnaires on efficacy, demographics, and professional development. The instructional coaches completed only the questionnaire related to professional development so as to maintain their anonymity.

Teacher Sense of Efficacy Scale. Classroom teachers' self-efficacy was measured using the long form of a Likert scale questionnaire called the Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001). Of the 24 questions, there are eight questions in each of three subcategories: student engagement, classroom management, and instructional strategies. The questionnaire uses a scale ranging from 1 (*nothing*) to 9 (*a great deal*); see Appendix B.

Demographics questionnaire. To capture classroom teachers' demographic information, 10 multiple choice or short-response questions were added to the Teacher Sense of Efficacy Scale. These additional items asked participants to indicate their gender, age, ethnicity, level of education attained, languages spoken, teacher certification, and experiences with special education and language acquisition (see Appendix C).

Professional development questionnaire. Classroom teachers' and instructional coaches' experiences with professional development were assessed by addressing the amount and quality of professional development provided by the school related to teaching dually identified students. Teachers were asked nine questions using a 5-point Likert-type scale (1 denotes *no impact* and 5 denotes *significant impact*), multiple choice, and one open-ended question (see

Appendix D). Instructional coaches had the same questionnaire, other than the three questions related to teaching dually identified students (see Appendix E).

Interviews. Classroom teacher support was also measured through semi-structured interviews with the executive director and principal. The three open-ended questions requested information relative to how the school defines inclusion and how the school prepares and supports general education teachers of dually identified students (see Appendix F). Field notes were also taken to record date, time, place, and my perceptions of participants responses.

Reading levels. Student reading levels were measured through two standardized reading assessments of reading accuracy, fluency, and comprehension: the 2011 Fountas and Pinnell and the 2006 Evaluacion Del Desarrollo De La Lectura 2 (EDL2; Beaver & Carter). Fountas and Pinnell assesses reading skills in English (i.e., Levels A to Z), whereas EDL2 assesses reading skills in Spanish (i.e., Levels A to 80). Levels correspond to emerging readers through the eighth-grade level. A conversion chart developed by Fountas and Pinnell equates the levels between these two measures.

Procedure

This section describes the procedures of the needs assessment study, including data collection and data analysis. The needs assessment study was conducted in the spring of 2015.

Data collection. Data were collected over a 3-week period. All data were collected on school grounds during regular school hours and stored on a password-protected laptop.

Questionnaires. Emails were sent to classroom teachers and instructional coaches containing links to each applicable questionnaire. All questionnaire responses were collected using Google Forms, an online survey tool.

Interviews. The semistructured interviews were conducted with the principal and executive director on school grounds during the school day. The interviews were audio recorded and stored on a password-protected laptop.

Reading levels. Midyear reading levels were collected from the school database and entered into a spreadsheet on a password-protected computer (see Appendix G). Student names were replaced with a number to anonymize the data.

Both reading assessments are administered on a one-to-one basis. A teacher listens to a student read the text. While the student reads the text, the teacher marks every word on the sheet. The teacher is required to give a check if the word is read correctly or note if the word was skipped or read incorrectly. If the word is read incorrectly, the teacher writes down the word the child said. A student must reach at least 95% accuracy to be considered an on-grade level reader. The reading portion is timed so that fluency can be calculated. Fluency is the number of correct words read in a certain amount of time. Once the child has finished reading, the teacher asks comprehension questions, which are scored according to a rubric.

Data analysis. The questionnaires were analyzed first, followed by the interviews. Reading levels were analyzed last and were used to compare teacher perceptions, noted in questionnaires and interviews, about students' achievement.

Quantitative data sources. Quantitative data sources were analyzed using descriptive statistics. Mean and standard deviation were calculated for the Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) and professional development questionnaire. The means of the three subcategories of the Teacher Sense of Efficacy Scale were compared to determine the lowest subcategory and the lowest items within each subcategory.

Additionally, frequency was calculated for all quantitative data sources. Students' overall English and Spanish reading achievement was analyzed by determining the frequency of each reading level for all students. The mean score of dually identified students was compared to non-dually identified students to determine if there was a gap between the two groups.

Qualitative data sources. Qualitative data sources were analyzed using thematic analysis (Braun & Clarke, 2006). After transcribing the interviews, I read the transcripts multiple times. Data were categorized and coded. A table was used to help organize the codes by research question and theme. The open-ended response on the professional development questionnaire was then coded and triangulated with themes from the interviews.

Findings and Discussion

This section is organized by research question. The initial findings, including key data, are categorized by each question. Complete tables and statistics can be found in Appendix H.

Research Question 1

The first research question sought to establish differences between dually identified and non-dually identified students reading achievement. To answer this question, I collected data on student reading levels.

Students should be reading at a Level D on Fountas and Pinnell (2011) or the equivalent of Level 6 in EDL2 (2006) by the end of kindergarten or the beginning of first grade. Midyear assessments using Fountas and Pinnell (2011) indicated 67% of dually identified students are reading below a Level D in English compared to 11% of non-dually identified students. The midyear assessments using EDL2 (2006) yielded that 89% of dually identified students reading below Level D in Spanish compared to 58% of non-dually identified students. These results show that there is a larger gap between the English achievement of dually identified students

when compared to their non-dually identified peers. This achievement gap in English is a concern because it shows that dually identified students are falling behind non-dually identified students, indicating that they, as dually identified students, may not be receiving adequate support.

Research Question 2

The second research question sought to establish how teachers perceive their efficacy in teaching reading to dually identified students in an inclusive and bilingual classroom. To answer this question, I used responses from the professional development questionnaire and the Teacher Sense of Efficacy Scale. The professional development questionnaire used a scale from 1 to 5. The mean teacher rating was 3.5 for effectiveness for teaching students with language acquisition needs and a 3.0 for teaching students with special education needs. The modal teacher rating was 4 for effectiveness in teaching students with language acquisition needs and a 3 for teaching students with special education needs, where 1 indicates *ineffective* and 5 indicates *effective*. This shows that teachers generally feel more effective in teaching students with language acquisition needs than students with special education needs.

When asked about how much their teaching practice has changed in regard to teaching dually identified students since starting at the bilingual public charter school, 46% of teachers rated themselves at 4, and 21% of teachers rated themselves at 5 (1 indicates *gotten worse* and 5 indicates *gotten better*). This shows that a majority of teachers believed there was a positive change in their teaching practice.

Participants rated their efficacy on a nine-point scale. The mean score across the eight questions for Student Engagement was 6.2; a 6 on the scale is midway between *some influence* and *quite a bit*. Within the Student Engagement domain, one of the lowest scoring questions was

about how much teachers are able help students think critically (4.1, where 4 is between *very little* and *some influence*). The other lowest scoring question was about how to motivate students who show low interest in school (3, where a 3 indicates *very little*). The low score of 3 could indicate that teachers, in general, believe that they have little ability to teach critical thinking skills or to motivate students who appear uninterested.

The mean score across the eight questions for Classroom Management was 7.2, or *quite a bit*, suggesting generally high teacher self-efficacy in this area. The mean score across the eight questions for Instructional Strategies was a mean of 7, or *quite a bit*, which suggests efficacy is fairly high in this area, but there is still room for growth. The subscale of Student Engagement was more highly rated than Classroom Management and Instructional Strategies, suggesting that student engagement could be an area of focus for future professional development.

Research Question 3

The final research question sought to establish what support was provided to teachers of dually identified students in an inclusive environment, and what future support could be provided. To answer this question, I used responses from the professional development questionnaire, which used a 5-point scale.

Current support. In terms of how much support is given to teachers in regard to teaching dually identified students, 32.1% of teachers gave a rating of 3 and 28.6% gave a rating of 2, where 1 indicates *no support,* and 5 indicates *sufficient support*. Additionally, 29% of teachers gave a rating of 3 on the quality of the support provided, and another 21% of teachers gave a rating of 2; 18% of teachers rated the quality of support 1 (where 1 indicates *poor* and 5 indicates *good*). In terms of the perceived impact of the support given to teachers, 43% of teachers gave a rating of 4, and 57% teachers gave a rating of 3 and below (where 1 indicates *no*

impact and 5 indicates *significant impact*). These findings suggest that not only was there not enough support, but also the quality of what was provided was perceived as *poor* because 39% of teachers rated the quality of support below a 2.

Similar to classroom teachers, instructional coaches most frequently rated 2 (where 1 indicates *none* and 5 indicates *sufficient*) for how much support is given to teachers regarding teaching dually identified students. Three out of four coaches gave a score of 2 (where 1 indicates *poor*, 3 indicates *neutral*, and 5 indicates *good*) for the quality of support provided to teachers. Instructional coaches were spilt on the degree of perceived impact the support has had on teachers' practice. Half of the coaches rated the impact 2, and half rated the impact 3 (where 1.0 indicates *no impact* and 5.0 indicates *significant impact*). These ratings by teachers and coaches indicate that the quality of support was insufficient to help them meet the needs of dually identified students.

Future support. In terms of future support for teaching dually identified students, 35.7% of teachers would most like coaching for teaching dually identified students, 28.6% would most like to collaborate more with specialists, 21.4% would most like more professional development experiences, 10.7% would most like to have professional learning communities, and 3.6% chose *other*, which was an open-ended option. For those who provided comments in the *other* option, 10 teachers answered that they would like "collaboration with specialists" (Participant 19) and having a "bank of materials ready to access" (Participant 8).

For future content of professional development experiences targeted at teaching dually identified students, 57% of teachers would most like to learn more about language acquisition, 25% would most like to learn about evidence-based interventions, 14.3% would most like to learn more about differentiation, and 3.6% chose *other*. When responding to the *other* category,

teachers made statements about, for example, wanting support with "getting a sense of children's needs and how to help them" (Participant 20).

In terms of further support in implementing content from professional development, 32% of teachers chose coaching, 25% of teachers chose collaborating with specialists, and 14.3% teachers wanted more time to implement strategies. The data revealed that 10.7% of teachers wanted professional development on how to implement strategies, 3.6% wanted direct input from another adult, and 3.6% of teachers said that they would like to have better understanding of the disabilities of the child.

Instructional coaches and the administration offered different views regarding future professional development. The instructional coaches ranked language acquisition and differentiation as the top priorities for professional development and time as the most important resource in being able to implement the required content. Through interviews, the administration indicated awareness that teaching support is unstructured and that the school relies on teachers' own skills regarding instruction for dually identified students. Administration assumed that teachers would seek help from the coaches if needed. For example, the principal stated:

> I think that it happens in the more informal meetings, sometimes more haphazardly and informally, and around coaching cycles where coaches have more expertise. Or, I think it's more likely that teachers know to call a meeting to ask for help from coaches or special education teachers. (Interview, p. 1)

Discussion

Overall, the needs assessment study indicated an achievement gap between the dually identified and non-dually identified students and that more high-quality professional development is needed to better support teachers in instructing dually identified students. The

data from this needs assessment study revealed that there is a large gap between dually identified students' and non-dually identified students' reading levels at the bilingual public charter school. There is a much wider gap in English reading levels than there is in Spanish reading levels between the two groups, which indicates that the problem of practice does exist within this bilingual public charter school.

The needs assessment not only highlighted that an achievement gap does exist but also revealed the discrepancies within areas of teacher self-efficacy. Overall, teacher self-efficacy was positive, however, teachers' views on their ability regarding student engagement was low. Specifically, teachers reported low efficacy in motivating students who show little interest and low efficacy in helping students to think critically. Teachers may perceive students who struggle with language and learning as having low motivation (Moreau, 2014). Low teacher efficacy in helping students think critically could be a factor inhibiting students from acquiring critical thinking skills.

Interestingly, the teachers rated themselves as having a high increase in their practice with dually identified students and noted that very little support was given. The two sets of data do not seem to align. This could be due to the honesty of the teachers in rating their own practice. This could also be because I was in a leadership role and the teachers may have overstated the support given, so as not to offend me. My role in the bilingual charter school could have influenced how teachers answered the questions.

The findings, however, demonstrated consistency among the different stakeholders' views about professional development needs. Teachers, instructional coaches, and administration agreed that there was a need for more structured and higher quality support for teachers of dually identified students. Both teachers and instructional coaches thought that learning about language

acquisition is a priority for professional development cycles. Teachers ranked evidence-based interventions high, and coaches prioritized differentiation. The data also indicated that teachers believed coaching is not only a preferred way of support, but also a tool to help them implement what is learned through professional development. This indicates that schoolwide professional development, followed with coaching cycles, could be beneficial for teachers.

Overall, this needs assessment study confirmed my identified problem of practice that dually identified students are not achieving in the area of reading commensurate with their peers in the same grade. Teachers rated themselves as having low efficacy in the areas of teaching critical thinking skills as well as motivating students who show low interest, which is consistent with the literature (e.g., Chu & Garcia, 2014; Rodriguez, 2009; Salend & Dorney, 1997). The findings highlighted the support that teachers want in teaching dually identified students. Professional development for teachers of dually identified students could include coaching and evidence-based interventions, both of which were of interest to the teachers.

Chapter 3

Intervention Literature Review: Professional Development Programs

The needs assessment study revealed a gap between the reading outcomes of dually identified students compared to non-dually identified students. The midyear reading levels showed that dually identified students had much lower English reading levels and Spanish reading levels when compared with non-dually identified students, with an even wider gap in English reading levels.

Although overall reported teacher efficacy is positive, teachers' views related to their own ability regarding student engagement is low. Specifically, teachers reported low efficacy in relation to motivating students who show little interest in learning and helping students think critically. This finding is interesting as dually identified students could be perceived as both showing low interest and struggling to acquire critical thinking through general education teaching strategies.

The needs assessment study also demonstrated a consistent view among the teachers, instructional coaches, and administration regarding professional development programs addressing dually identified students. The findings suggested that there needs to be more high quality professional development related to dually identified students. Additionally, teachers listed coaching (32%) as their first choice for professional development to support their teaching of dually identified students and then evidence-based practices (25%) as their second choice for content area. In this chapter, I investigate features of evidence-based practices for dually identified students, effective professional development, and how these supports relate to teacher self-efficacy. Self-efficacy has been defined as the "belief in one's capabilities to organize and execute the sources of action required to manage prospective situations" (Bandura, 1995, p. 2).

In other words, self-efficacy is what a person believes he or she can achieve or complete, given a particular circumstance.

Theoretical Frameworks

Professional development and teacher self-efficacy can be examined through two related frameworks: social cognitive theory and the interconnected model of professional growth. Social cognitive theory is used to explore how personal, environmental, and behavioral factors influences learning (Bandura, 1986). The second framework, the interconnected model of professional growth, explains how teacher change occurs through reflection and enactment among four domains (Clarke & Hollingsworth, 2002).

Social Cognitive Theory

According to social cognitive theory, learning occurs in a social context where humans' constant contact with one another influences how they process information (Bandura, 1986). Social cognitive theory posits that learning is an active process and that people not only learn through their own experiences, but also learn through observing the behavior around them and their consequences (Bandura, 1986). Bandura's (1986) triadic reciprocity suggests that behavior, cognitive and other personal factors, and environmental factors all "operate interactively as determinants of each other" (p. 23). Triadic reciprocity emphasizes that learning and behavior are not unidirectional but continuously interacting between the three factors. Triadic reciprocity can be useful in understanding the input an individual receives while developing self-efficacy. The reciprocal nature and inclusion of personal factors of Bandura's (1986) triadic reciprocity, for example, suggest that people have more internal control of their behavior and learning.

Bandura (1977) hypothesized that self-efficacy can "determine whether coping behavior will be initiated, how much effort will be expended, and how long it will be sustained in the face

of obstacles and aversive experiences" (Bandura, 1977, p. 191). Self-efficacy is a critical element to personal change, therefore, as it relates to one's locus of control and influences decision making (Bandura, 1977). An important construct affecting behavior and motivation, self-efficacy influences goal setting, amount of effort given, perseverance, and resilience. People with higher self-efficacy usually take on harder tasks and are more willing to try new things (Bandura, 1994).

Bandura (1977) identified four sources of efficacy beliefs: mastery experiences, vicarious experiences, verbal persuasion, and emotional arousal. Mastery experiences are direct encounters with success through engagement in a behavior that brings about a desired outcome. Vicarious experiences are situations where the learner is able to watch the teacher or other students perform a task, and witness the outcome of the action. Verbal persuasion involves using verbal suggestions while leading an individual through a task that might have been overwhelming in the past. This verbal persuasion helps the individual believe he or she is capable of completing the task. Emotional arousal refers to the physiological feedback within oneself. People somewhat rely on their physiological arousal in gauging their own stress and anxiety levels. As stress and anxiety often decrease performance, people usually perform better when not feeling physiological arousal. The four sources of efficacy information are used to construct a sense of self, including self-efficacy.

As such, social cognitive theory provides the background and foundation of how an increase in self-efficacy can support one's learning. One model of teacher change, the interconnected model of professional growth by Clarke and Hollingsworth (2002), assumes that one's actions, personal factors, and external factors interact to support teacher learning and change, which aligns with Bandura's (1986) triadic reciprocity components. Additionally, both

the interconnected model of professional growth and triadic reciprocity suggest that learning is not linear but rather a multidirectional interaction between factors.

Interconnected Model of Professional Growth

Clark and Hollingworth (2002) suggest that the teacher, as a learner, has four main domains: personal domain, domain of practice, domain of consequence, and external domain. The four domains in this model are connected through reflection and enactment, which can lead to teacher change (see Figure 3.1). These *change sequences*, defined as a change in one domain leading to a change in another domain, are bidirectional other than from the external domain to the domain of practice. Teacher change occurs when one or more of the four domains influence each other through a process of reflection or enactment (i.e., action based on beliefs, knowledge, or prior experiences).

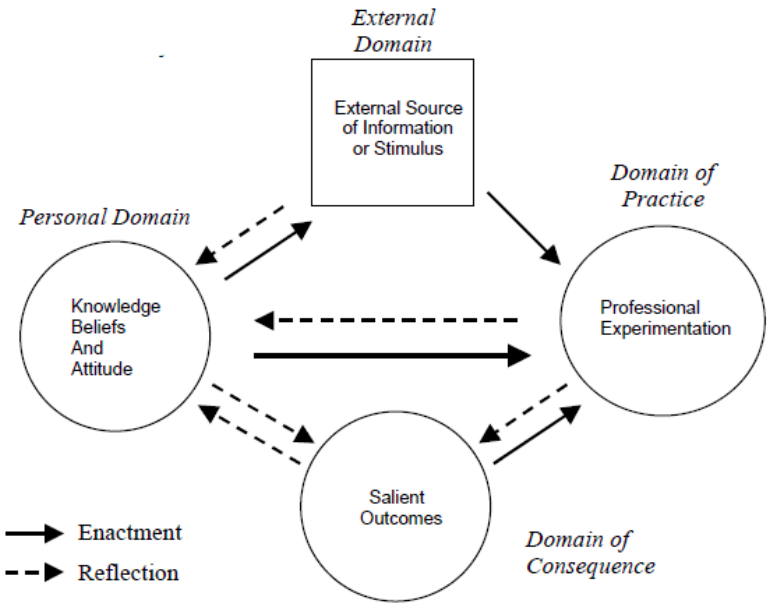

Figure 3.1. The interconnected model of professional growth. The dashed lines represent reflection and the solid lines represent enactment. Reprinted with permission from "Elaborating a Model of Teacher Professional Growth" by D. Clarke and H. Hollingsworth, 2002, *Teaching and Teacher Education, 18*, p. 951. Copyright 2002 by Elsevier Science.

The personal domain focuses on a teacher's personal beliefs, attitude, and knowledge, which aligns with Bandura's (1977) theory of self-efficacy. For example, the increased value that a teacher places on new teaching strategies and new pedagogical knowledge is an example of change occurring in the personal domain (Clarke & Hollingsworth, 2002), which could then influence one's decision making and related self-efficacy. The domain of practice refers to a teacher's openness or experience with new instructional strategies and ideas. The domain of consequence, or salient outcomes, refers to the outcomes that the teacher experiences as a result of the domain of practice. The external domain includes outside resources and support such as professional development. The interconnected model of professional growth shows how the mechanisms of reflection and enaction connect the four domains to support professional growth and that the change sequences are individualized for each teacher (Clarke & Hollingworth, 2002).

Synthesis of the Intervention Literature

This section begins by examining evidence-based practices for teaching dually identified students. The synthesis then reports on literature related to effective professional development to inform an intervention for increasing teacher self-efficacy based on evidence-based practices in teaching dually identified students. The studies reviewed are considered as acceptable quality research against the criteria set by Gersten et al. (2005) such as describing participants, implementation and description of comparison conditions, outcome measures, and outcome analysis. Each study demonstrated that the intervention yielded positive results for diverse students, which includes ELLs and students with disabilities.

Evidence-Based Practices

IDEA (2004) and NCLB (2002) mandate that teachers use evidence-based practices (Kretlow & Blatz, 2011). Evidence-based practices can be defined as "instructional techniques with meaningful research support that represent critical tools in bridging the research-to-practice gap and improving student outcomes" (Cook & Cook, 2011, p. 2). An evidence-based practice that could be the focus of an intervention is peer-assisted learning strategies (PALS)—a classwide peer tutoring program that provides students with practice opportunities and immediate feedback (Calhoon, 2005; Fuchs & Fuchs, 2005).

Peer-assisted learning strategies. PALS is a peer tutoring program, first piloted at Vanderbilt University and subsequently revised through consultation with teachers, that can be implemented classwide or in small groups (Fuchs & Fuchs, 2005). The reading program targets second- to sixth-grade students. Each student pair consists of one high performer and one low performer, based on teacher assessment. The high-performing student models the reading and the activity, and then they swap roles. After 4 weeks, students receive new partners. PALS requires the teacher to spend a few lessons teaching the students the routine and structures of each component before students engage in the activities independently.

The four main components of the program include partner reading, retell, paragraph shrinking, and prediction relay. In partner reading, the students read the text aloud for 5 minutes; the higher performer reads first, and then the lower performer reads. While one student is reading, the partner is following along to correct mistakes or help decode. During retell, the partners ask each other what has happened in the story. During paragraph shrinking, the students read one paragraph at a time, and then summarize the main idea in each paragraph, with each student having 5 minutes. Prediction relay extends paragraph shrinking into larger chunks of text

and also has students make and check predictions. PALS is typically implemented three times per week for about 30 minutes each session.

Peer-assisted learning strategies and students with special needs. PALS was first used in the general education classroom. Follow-up research was conducted with students with disabilities, including students with speech and language impairments as well as learning disabilities, in general education classrooms (e.g., Fuchs & Fuchs, 2005, Fuchs et al., 2002; Rafdal et al., 2011). PALS has increased reading outcomes, such as reading comprehension, for students with disabilities in the general education classroom (Sáenz, Fuchs, & Fuchs, 2005). PALS also has positive outcomes for students who are English language learners (McMaster, Kung, Han, & Cao, 2008) and who are dually identified (Sáenz et al., 2005).

One study that showed how PALS can be an effective reading program for students with disabilities was conducted by Fuchs et al. (2002). This yearlong study examined the effectiveness of phonological awareness programs with and without PALS for kindergartners with disabilities in an inclusive classroom. Nineteen general education teachers and 25 students with disabilities participated in this study. The study had two treatment groups and one control group. One treatment group included the phonological awareness program, and the other treatment group included the phonological awareness program plus PALS. There was 1-day training on phonological awareness for all teachers and a half-day PALS training for the treatment group. The findings demonstrated that students in the phonological awareness plus PALS group outperformed the phonological awareness treatment group and control group in most areas. Furthermore, the growth gain in the phonological awareness plus PALS group was superior to that of the phonological awareness treatment group (Fuchs et al., 2002). Although not

all students with disabilities improved, the findings suggested that PALS can be used in general education classrooms to support the reading instruction for students with disabilities.

Students with reading disabilities can make gains in reading skills when using PALS (Calhoon, 2005). Two groups of teachers participated in a 1-day training: a treatment group (n = 2) that implemented Linguistic Skills Training and PALS, and a control group (n = 2) that taught Saxon Phonics Intervention using scripted lessons. The results showed a significant difference in achievement; the treatment group outperformed the control group in letter word identification, word attack, and passage comprehension (Calhoon, 2005). Furthermore, overall growth was measured, and the treatment group outperformed the control group in growth in the same three areas (Calhoon, 2005). Calhoon's findings aligned with previous studies that show peer tutoring is an effective program for increasing reading comprehension and phonological skills in students with learning disabilities (e.g., Fuchs & Fuchs, 2002; Rafdal et al., 2011).

Dually identified students have also been the focus of studies on the efficacy of PALS. Sáenz et al. (2005) targeted students with both special education needs and language acquisition needs in the study of a transitional bilingual program with third- to sixth-grade teachers. Each of the classrooms had ELLs and at least two students with learning disabilities. A total of 132 native Spanish speakers were part of the study. The teachers in the treatment group had a full day PALS workshop. The PALS treatment group showed strong improvement in reading comprehension: effect sizes for low-, average- and high-achieving dually identified students were 0.86, 0.60, and 1.02 respectively. PALS was shown to improve reading comprehension for ELLs with or without learning disabilities. Furthermore, teachers responded positively to social and academic benefits of PALS, and students reported that they enjoyed participating (Sáenz et al., 2005). This finding demonstrates the initial evidence of the impact PALS has on ELLs,

illustrating that PALS is a strategy that closely supports second-language learners and an intervention that teachers find feasible to implement.

The studies reviewed indicate that PALS is an effective reading intervention for students with disabilities (Calhoon, 2005; Fuchs et al., 2002; Mathes et al., 2005; Rafdal et al., 2011; Sáenz et al., 2005) and in general education settings with mixed ability students, specifically, for ELLs with or without disabilities (Sáenz et al., 2005). The studies also indicate that general education teachers view implementation of these interventions as feasible and worthwhile (e.g., Mathes et al., 2003; Sáenz et al., 2005). Although there is a paucity of research on the use of PALS in teaching dually identified students in general education settings, the studies that do exist provide support for its use.

Professional Development and Teacher Self-efficacy

Teacher self-efficacy is rooted in social cognitive theory and is defined in this study as teachers' beliefs about their own capacity in influencing student learning outcomes. Teacher self-efficacy can be categorized into general teaching self-efficacy and personal teaching efficacy (Tschannen-Moran & Woolfolk Hoy, 2001). General teaching efficacy is a teacher's belief in the ability of teachers, as a profession, to influence student learning, and personal teaching efficacy, or teacher self-efficacy, is specific to a teacher's belief in his or her own ability to influence student learning (Tschannen-Moran & Woolfolk Hoy, 2001). Research has shown that teacher self-efficacy has been connected to educational outcomes for students such as student achievement and motivation (Tschannen-Moran & Woolfolk Hoy, 2001). Teacher self-efficacy and teacher behavior are related, which means that self-efficacy influences teacher practice within the classroom (Ashton, 1984). Teachers with a stronger sense of self-efficacy also have a higher expectation of students and believe it is their responsibility for students' learning (Ashton,

1984). Also, teachers with stronger self-efficacy tend to try new practices in the classroom as well as be willing to differentiate for students (Dixon et al., 2014).

Effective professional development. To support change in teachers' instructional practices, professional development initiatives should provide the opportunity for investigation, experimentation, reflection, discussion, and collaboration with one another (Bayar, 2014; Gregson & Sturko, 2007) as opposed to workshops that are one-size-fits-all, where teachers are passive learners (Diaz-Maggioli, 2004; Nishimura, 2014). Meaningful and effective professional development should engage teachers in a manner that elicits change in teacher practice (Nishimura, 2014) by incorporating strategies that could raise teacher self-efficacy (Carleton, Fitch, & Krockover, 2008; Posnanski, 2002; Ross & Bruce, 2007).

Professional development that aligns with constructivist principles is one way to approach learning for teachers and to raise teacher self-efficacy through experiencing mastery (Carleton et al., 2008; Posnanski, 2002). Self-efficacy can be influenced when teachers are introduced to a constructivist style of learning where learners construct knowledge for themselves and are provided opportunities for improving content knowledge (Carleton et al., 2008). In one study, for example, teachers engaged in workshops where they worked together to investigate a fictional crime using science content, which provided the teachers with many opportunities to observe each other modeling best practices, engaging in feedback, and mentoring one another. The design of this study was to have teachers experience constructivist teaching and inquiry-based learning with the hope that these strategies could be transferred to the teacher's pedagogical practice (Carleton et al., 2008). The researchers found an increase in teacher self-efficacy in science instruction. This result indicates that professional development can raise personal teacher self-efficacy when using effective methods such as providing content

for teachers to master, model teachers to observe, and a support network for resources and emotional support (Carleton et al., 2008). This study illustrates how a constructivist approach can support teachers in learning content and experiencing mastery, which can raise teacher self-efficacy.

Another way in which the constructivist approach targets teacher self-efficacy is through the use of reflection, discussion, and modeling of content (Posnanski, 2002). Both university science educators and classroom-based science teachers led a professional development program requiring teachers to meet weekly for 3- to 4-hour sessions over 32 weeks. The Science Teaching Efficacy Beliefs Instrument (Riggs & Enochs, 1990) was used to measure teacher self-efficacy. A Likert scale format was used along with another survey with opened-ended prompts such as, "Discuss an activity/session you found particularly meaningful or helpful to you in effectively teaching science." The results indicated that the professional program had a positive influence on teacher beliefs about their own ability to teach science and to use inquiry-based teaching (Posnanski, 2002). The constructivist approach to learning for teachers enhances teachers' content knowledge, which encourages them to become self-reflective practitioners and experience mastery.

Researchers have designed professional development to include mastery experiences as a way to raise teacher self-efficacy. Focusing on mastery experiences, a study by Ross and Bruce (2007) conducted in all elementary schools in a Canadian district with 106 sixth-grade teachers in treatment and control groups used peer observations, modeling, requiring implementation of practice in the classroom, and debriefing experiences with peers as professional development formats. The researchers designed a professional development program that consisted of a 1-day workshop followed by three, 2-hour, after-school sessions. The professional development

workshop was intentionally designed with scaffolds to increase teacher competence and to help teachers redefine success, and incorporated active learning, examples from the classroom, collaboration, reflection, feedback and practice, and a focus on content. Analysis of the results from the Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) indicated that the professional development had a positive effect on teacher self-efficacy. Ross and Bruce demonstrated that a 1-day professional development workshop followed by supporting sessions that include feedback, implementation of practice, and modeling, could increase teacher self-efficacy.

Collaborative Professional Development

Professional development that aligns with the constructivist approach could provide teachers with a mastery experience that holds potential to raise teacher self-efficacy (Carleton et al., 2008; Posnanski, 2002; Ross & Bruce, 2007). Collaboration between teachers is one of the key features of professional development found to be effective in helping teachers raise their self-efficacy (Borko, 2004; Carleton et al., 2008). Based on the assumption that learning and teacher growth are not isolated experiences, professional development seeks to promote collaboration allowing teachers to co-construct knowledge and participate in meaningful activities (Musanti & Pence, 2010). Collaboration provides emotional support and a safe place to talk about ideas and inquiry-based conversations (Mintzes, Marcum, Messerschmidt-Yates, & Marc, 2013).

Collaboration in professional development can take different forms, and one way to collaborate is through the use of professional learning communities. Professional learning communities can help increase teacher self-efficacy, as teachers were enabled in experiencing mastery and vicarious experiences as well as social persuasion through feedback, observations,

discussions, and collaboration (Mintzes et al., 2013). Teacher collaboration supported improvement of content knowledge and application of new pedagogy because the feedback component allowed teachers to reflect, set goals, and scaffold ideas for one another (Chong & Kong, 2012). Collaboration encourages inquiry as part of professional development, which can influence teacher practice and teacher self-efficacy (Chong & Kong, 2012).

Professional development should be collaborative, as learning happens through exchange, dialogue, and constant challenges (Musanti & Pence, 2010). In a study by Musanti and Pence (2010), 14 bilingual or ESL teachers were trained as co-facilitators (i.e., co-teachers) in a general education classroom, which served as a model of effective bilingual teaching. Guest teachers and the co-facilitators collaborated on building an effective classroom for bilingual learners by providing opportunities for peer observations and feedback sessions. Qualitative data revealed that the guest teachers viewed the intervention as a means "to fix teachers" (p. 78) and peer observations "were evaluative" and "did not seem fair" (p. 81), which fostered feelings of resistance. The authors suggested that future research should avoid measuring teachers against a standard, and instead move toward open dialogue so that professional development is viewed as a collaborative enterprise (Musanti & Pence, 2010). This study suggests that when planning the intervention, part of the data collection should be focused on teacher perspective. Resistance may be unavoidable but should be viewed as a force for change instead of a barrier to collaboration (Musanti & Pence, 2010). These findings indicated that professional development needs to be seen as a collaborative effort of mutual exchange where teachers engage and experience vicarious experiences to help increase efficacy.

Collaboration among teachers in similar content areas is another indicator of effective professional development (Borko, 2004; Carleton et al., 2008; Mintzes et al., 2013; Musanti &

Pence, 2010). In a study of 30 fourth- through ninth-grade teachers, Powell-Moman and Brown-Schild (2011) examined the impact of a professional model of collaboration between scientists (i.e., content specialists) and teachers to determine the association between teachers working with scientists and self-efficacy pertaining to inquiry-based learning. The results showed that professional development may have influenced teacher's self-efficacy scores in teaching an inquiry-based approach. The teachers increased their content knowledge in science, which in turn, increased their efficacy through their exposure to this mastery experience. The researchers raised the important point that teacher self-efficacy is not an all-or-none concept, and that teachers' levels of efficacy can vary depending on the type of content they are teaching (Powell-Moman & Brown-Schild, 2011). This implies that an effective intervention should target teacher content knowledge and could include a content expert.

These studies illustrate that collaboration as a component of professional development can increase teacher self-efficacy. Another important takeaway is the study design. To measure teacher self-efficacy, several studies used data sources such as field notes, interviews, and teacher self-efficacy surveys (Henson, 2010; Musanti & Pence, 2010). The interviews in the studies provided unique perspectives from the teachers on their instructional practices and how they had changed as a result of their participation in the project. The use of interviews with teachers can provide insightful information about teacher self-efficacy and should be considered when designing an intervention to better understand teachers' perceived changes in self-efficacy.

Coaching as Professional Development

Coaching and mentoring are professional development designs that researchers often use to provide meaningful feedback and verbal persuasion, and enable teachers to experience mastery (Hopkins-Thompson, 2000; Yost, 2002). Coaching can be defined as a partnership of

two people, with one being an expert that gives individualized support to the other after an initial training occurs or in a certain content area (Kretlow & Bartholomew, 2010). Coaching has also been defined as a tool that impacts teacher practice and has a positive effect on student learning (Ferguson, 2014; Reinke, Stormont, Herman, & Newcomer, 2014). Coaching can include student-centered coaching, which focuses on student outcome goals, and teacher-centered coaching, which focuses on teacher outcome goals (Sweeney, 2010). Professional development for teachers that takes the form of coaching can be supportive in increasing teacher self-efficacy (Yost, 2002).

Researchers have developed indicators of quality instructional coaching. The seven principles of effective instructional coaching to support teacher using research-based practices are: (a) teacher and coach are equal partners, (b) teachers have choice, (c) empowerment of teachers, (d) reflection, (e) authentic dialogue, (f) application in real life, and (g) coaches get as much as they give (Knight, 2009). The aim is for an authentic partnership between teacher and coach. Knight (2009) suggests that the four domains, or foci, of coaching are classroom management, content, instruction, and assessment, and that effective coaching techniques include observation of teachers, modeling for teachers, use of data, and prompt debriefs. A checklist of critical teaching behaviors can be a useful tool for observations and feedback should be specific and straightforward (Knight, 2009). Coaches should observe without judging, and each coaching session needs to be tailored to each teacher's specific needs (Knight, 2009). These coaching practices can inform the structure of the intervention to enhance the effectiveness of the coaching sessions, as coaching can be related to improvements in teacher self-efficacy and teacher practice (Cantrell & Hughes, 2008; Reinke et al., 2014; Schidler, 2009).

Pairing professional development with coaching is one way to support teachers to experience mastery, which could raise teacher self-efficacy (Cantrell & Hughes, 2008; Kretlow, Wood, & Cooke, 2011). One study, consisting of 22 sixth- through ninth-grade teachers from eight different towns in a small southeastern state in the United States, explored how professional development in literacy impacts general and personal teacher self-efficacy. The teachers in the study attended a summer institute, two regional meetings, and monthly onsite coaching (Cantrell & Hughes, 2008). One major conclusion was that coaching supports teachers in experiencing mastery, which is one of the sources for increasing teacher self-efficacy (Cantrell & Hughes, 2008). Through interviews, the researchers concluded that the feedback given by coaches played an essential role in the teachers becoming proficient in using new teaching techniques.

Another study investigated how professional development paired with coaching interacted with teacher practice and the value that teachers attributed to coaching (Kretlow et al., 2011). The study was conducted in a Title I elementary school in the southeastern part of the United States. The participants were three kindergarten teachers of varying years of experience. The teachers attended a 3-hour in-service training about mathematics, and subsequent one-on-one coaching was provided to each teacher. The coaching structures consisted of a preconference meeting, one-to-one coaching, and a debrief meeting. Teachers improved their instruction after the in-service training, but there was an additional level of growth after the one-to-one coaching. The researchers highlighted the importance of having frequent and intensive coaching opportunities (Kretlow et al., 2011).

The studies by Cantrell and Hughes (2008) and Kretlow et al. (2010) support that coaching is an effective method of supporting teachers in refining their practice and experiencing

mastery, which is a source of raising efficacy according to Bandura (1977). The use of specific feedback focused on one content area, such as early literacy or classroom management, is one way in which teachers can experience mastery as it provides teachers with focused and achievable goals (Cantrell & Hughes, 2008; Kretlow et al., 2010; Reinke, 2014; Shidler, 2009). Coaching that targets one topic is more effective in raising teacher self-efficacy than coaching that covers a wide range of topics such as room arrangement, planning, and a variety of content areas (Reinke et al., 2014; Shilder, 2009). Teachers are more likely to implement new strategies in their practice when feedback is specific and when goals are set (Reinke, 2014). This research implies that there could be a higher fidelity of implementation of new skills and subsequent changes in teacher practice when professional development is followed by coaching.

Others have found a relationship between increased teacher self-efficacy and effective coaching practices. Yost (2002) examined how a mentoring program for teachers enhanced teacher self-efficacy by studying teachers as they received ongoing support and opportunities to model and practice, be observed, and receive feedback. Three veteran teachers enrolled in mentoring classes and then became mentors to novice teachers. The mentors provided support with planning, modeling, and team-teaching lessons, as well as provided clinical observation and feedback (Yost, 2002). Data collection included observations and interviews. Mentor teachers' self-efficacy increased as they took on more leadership roles, increased their levels of influence, and self-reflected on their own practice (Yost, 2002). The novice teachers reported increased competencies and were more willing to try innovative practices (Yost, 2002). The findings of this study are consistent with the mastery experiences and vicarious experiences mentioned by Bandura (1977). Although this qualitative study had a small sample size, the findings provided insights on how coaching or mentoring and teacher self-efficacy are be interrelated.

The findings from these studies imply that coaching can be an effective tool to help teachers experience mastery and receive verbal persuasion, which can increase teacher self-efficacy. Professional development can be a way to raise teacher self-efficacy to address teaching students with specific learning needs (Kosko & Wilkins, 2009). Professional development that includes constructivist approaches and coaching can increase teacher self-efficacy by targeting the four main sources of self-efficacy. Knight (2009) provided coaching strategies, and both Reinke et al. (2014) and Kretlow et al. (2011) illustrated how coaching can improve teacher practice, especially when implementing evidence-based programs. When considering a design for intervention, the format of a professional development session followed by coaching should be considered.

Summary

General education teachers have exhibited difficulties in adapting instruction to include students with disabilities in the general education classroom, particularly regarding an understanding of their own roles and responsibilities (Keaney, 2012). Previous researchers have cited the lack of teacher training leaving teachers feeling unprepared to teach students who may experience difficulties with learning (Desimone & Parmar, 2006a; Florian, 2012; Greenleaf et al., 2001). PALS has been shown to be effective in meeting the learning needs of both general education and special education students (Calhoon, 2005; Fuchs et al., 2002; Fuchs & Fuchs, 2005; Rafdal, McMaster, McConnell, Fuchs, & Fuchs, 2011) and could be implemented by general education teachers to benefit all students in the current context.

The needs assessment findings showed that teachers want additional professional development in teaching dually identified students. As demonstrated in the literature review, collaborative professional development, such as coaching, can improve teacher practice and

teacher self-efficacy. Social cognitive theory and the interconnect model of professional growth can help explain how professional development followed by coaching supports teacher learning and growth. Coaching could create a space for teachers to develop their teacher self-efficacy, allow for teacher reflection, and enable teachers to implement what they have learned, which targets all four domains of the interconnected model of professional growth.

The review of the literature describes PALS an evidence-based practice for dually identified students in general education classrooms, which could form the basis of a professional development experience with coaching cycles to increase reading achievement of dually identified students. The coaching cycles would take place after a 1-day professional development workshop focused on providing content knowledge on PALS implementation. Each coaching cycle would consist of preplanning, a lesson observation, and a debrief meeting to provide teachers with support and feedback regarding effective implementation of PALS for dually identified students.

Chapter 4

Procedure and Methodology

The findings from the needs assessment study demonstrated a discrepancy between the reading achievements of dually identified students and the broader student population within the bilingual public charter school. The survey participants responded that the school provided almost no professional development support for working with dually identified students and that previous professional development had been of poor quality. Based on the needs assessment study and the intervention literature review, the importance of teacher self-efficacy and how teacher self-efficacy can be engendered through professional development were considered when designing an intervention related to the problem of practice. The purpose of this study was to examine the relationship between coaching cycles following a 1-day professional development workshop and changes in teacher practice regarding dually identified students. A secondary purpose was to examine the relationship between teacher self-efficacy and student reading levels.

Professional development for teachers can lead to a change in teacher practice that positively influences student outcomes (Borko, 2004; Flynn, Lissy, Alicea, Tazartes, & McKay, 2016; Posnanski, 2002). Professional development has also been linked to an increase in teacher self-efficacy (Epstein & Willhite, 2015; Yost, 2002), further supporting the use of professional development experiences as an intervention for the problem of practice. These findings can be explained through Bandura's (1977) four sources of self-efficacy (i.e., mastery experiences, emotional arousal, vicarious experiences, and verbal persuasion) and professional development could target these four sources of self-efficacy by providing content knowledge, modeling of PALS, and opportunities to practice PALS with a colleague. Additionally, coaching cycles could provide collaboration, including feedback and lesson modeling.

This qualitative study was guided by three main research questions and two sub-questions:

1: How do teachers of dually identified students experience coaching cycles following a 1-day professional development workshop?

1A: To what degree do the teachers participate in coaching cycles following a 1-day professional development workshop?

2: How do teachers describe changes in their self-efficacy after coaching cycles following a 1-day professional development workshop?

2A: What is the relationship between teacher self-efficacy and dually identified students' reading levels?

3: How do teachers describe changes in their practice after coaching cycles following a 1-day professional development workshop?

Research Design

Qualitative research is a prominent method in the social sciences (Brantlinger, Jimerez, Klingner, & Pugach, 2005). A descriptive case study was chosen, in part, due to the limited number of participants. Descriptive case studies describe an intervention or phenomenon and the setting in which it occurred (Yin, 2003). A case study design is appropriate when asking *how* or *why* questions (Yin, 2003) and can provide a deep understanding of specific situations in a certain context (Schutt, 2012). Additionally, researchers can use a case study design to explore complex relationships, interventions, and settings (Yin, 2003).

Previous studies on coaching and teacher self-efficacy have used case study methodology (e.g., Cantrell & Callaway, 2008; Chong & Kong, 2012; Kretlow et al., 2011). Case study design allows collaboration between the researcher and participant, enabling the participants to share

their stories (Baxter & Jack, 2008). In this study, I attempted to describe the relationship with coaching cycles following a 1-day professional development workshop and teacher self-efficacy, and changes in practice by examining teachers' experience, observing lesson implementation, and reviewing narratives about their teacher self-efficacy. A descriptive case study design allowed me to gain a deeper understanding of the relationship between coaching cycles, teacher self-efficacy, teacher practice, and student reading levels.

Process Evaluation

In educational research, fidelity of implementation has several definitions (O'Donnell, 2008). One definition for the fidelity of an intervention is the extent to which the program or intervention was implemented as intended (Dusenbury, Brannigan, Falco, & Hansen, 2003; Nelson, Cordray, Hulleman, Darrow, & Sommer, 2012), which can be measured by adherence, dose, quality of program delivery, program differentiation, and participant engagement (Dunsenbury et al., 2003; Nelson et al., 2012). In this study, adherence, dose, participant engagement, and quality of program delivery were assessed to determine fidelity of implementation. Program differentiation was not analyzed because it did not align with the intervention.

Adherence is defined as the extent to which an intervention and methods were implemented as designed (Dusenbury et al., 2003). Adherence for this study was measured by examining the structure of the intervention. One of the indicators of implementation fidelity for teacher coaching was whether the structure was followed during the coaching cycles (Powell & Diamond, 2013). The structure included three main components: pre-observation meeting, observation, and debrief meeting. Coaching field notes were used to monitor fidelity for these three components. Dose was defined as the amount of the intervention or program that was

delivered (Dusenbury et al., 2003). Dose was measured by monitoring teacher attendance in coaching cycles.

Quality of service was also used to measure fidelity. Dusenbury et al. (2003) defined quality of service as "the extent to which participants are engaged by and involved in the activities and content of the program" (p. 244). Quality of service was measured by collecting coaching session notes on teacher implementation of PALS. Teacher fidelity in engaging with the coaching cycles, including pre-observation meeting, observation, and debrief meeting, was noted in coaching cycle field notes and the researcher's journal. Observations were used to determine how much each participant engaged with the coaching cycles.

Outcome Evaluation

A pretest established a baseline for teacher self-efficacy (Henry, 2010) and the posttest detected perceived changes in teacher self-efficacy. Student reading levels were collected at the beginning of the year and at the end of year and compared to detect any changes. The variables aligned with the logic model (see Appendix I).

Context

The setting of this qualitative study was a bilingual public charter school in the Washington, DC area, with approximately 540 pre-kindergarten- to fifth-grade students within 28 inclusive classrooms. Every summer, the school dedicated 3 weeks to teachers' learning including instructional practices, behavior management, special education, dual language programming, and school policies. The Vanderbilt Kennedy Center, a research center that focuses on disabilities, led a 1-day PALS training workshop during this 3-week period. The workshop content included an overview of the research support for PALS and PALS lessons delivery. First, teachers were provided with information about how students should be paired.

Then, specific components of PALS lessons, such as partner reading, retell, paragraph shrinking, and predication relay were explained and modeled. Paragraph shrinking involves asking students to summarize the paragraph they have read in 10 words or less. Predication relay involves asking students to first predict, then read, and then check the prediction. Participants practiced lesson delivery and were provided with feedback by the trainer. This served as implementation fidelity.

All second- through fifth-grade teachers attended the PALS training workshop which took place in August 2016 during the school's mandatory summer institute. At the workshop, the trainer distributed handouts of the PowerPoint presentation and all necessary materials to implement the PALS program. Background information and research on PALS was provided to the teachers. The trainer emphasized the characteristics of PALS that are evidence-based practices and the importance of fidelity. Next, the trainer described one of the four instructional activities within a PALS lesson and its implementation. After the trainer's explanation, the teachers were asked to experience the instructional activity with each other by pretending to be students. The trainer engaged with participants to provide feedback to teachers and to answer any questions. Once the teachers had a chance to experience the instructional activities, the trainer prompted them to reflect on the experience. This format was used for all four instructional activities—partner reading, retell, paragraph shrinking, and prediction relay.

Method

This section describes the participants and measures.

Participants

Criterion sampling was used to determine participants. Criterion sampling is selecting cases that meet a predetermined criterion of importance (Patton, 2001). In this study, the teachers: (a) were required to be approved by the school administration, (b) had attended the 1-

day PALS training workshop, (c) were willing to implement PALS lessons, and (d) were general education teachers.

The two participants, one third-grade teacher and one fourth-grade teacher, worked with multiple groups of students. Both teachers signed a consent to participate (see Appendix J). They taught a combined total of 81 students, 13 of which were dually identified. Each classroom of approximately 22 students had three to five dually identified students. The third- and fourth-grade students were typically 8 to 10 years old. The third-grade classes were comprised of 21 males and 19 females and identified as 39% Caucasian, 29% Hispanic/Latino, 28% Black/African American, 1% Asian, and 1% two or more races. The fourth-grade classes were comprised of 25 males and 16 females, and the students identified as 34% Caucasian, 33% Hispanic/Latino, 20% Black/African American, 11% two or more races, and 2% Asian.

Karen. Karen is a Caucasian, English-only speaking female in her early 30s with a master's degree in education. Karen taught third grade and had two cohorts, or classes, of students; each class had up to 24 students. She met with each class 2 days a week. During the time of the study, Karen was engaged in a cycle of performance review with the principal. A performance review entails additional formal observations and additional meetings with the principal to obtain feedback on how to improve teaching practices. Karen was also engaged in an additional coaching cycle with a different coach from the school as part of her performance review plan. The coaching cycle was aimed to support Karen with classroom management as there were many students with high behavior needs in the two classes. Due to the additional coaching cycle and performance review, Karen had very limited planning time and after-school meeting times.

Karen was a first-year classroom teacher but considered herself to have 5 years of experience in education due to her work in after-school and summer programs. She referred to herself as a reading specialist, because she specifically taught reading to students in a summer program 3 years ago at the current context and took literacy specific courses when she was earning her master's degree. With her interest in literacy and in PALS, Karen agreed to the study. as she was interested in PALS due to her interest in literacy. Karen was in the process of earning her teaching license and certification at the time of the study. The certification process is to have a bachelor's degree, complete a teacher certification program, and to obtain a passing score on two state tests; one to assess core academic skills and one to assess a particular subject area.

Karen's classroom included a carpet area, student tables, a semicircle table, a whiteboard, a take-a-break corner, and a classroom library. Small student tables were arranged to face each other, and four students were allocated to each pair of tables. The carpet area was in front of the whiteboard and an easel. The semicircle table was near a wall where small groupwork sometimes took place. The classroom had big windows that lined one wall.

Jessica. Jessica is an African American, English-only speaking female who is in her early 30s with a master's degree in elementary and special education. She taught fourth-grade English language arts to three cohorts of 17 students each and saw each cohort every day. The students rotated between teachers each day.

Jessica had 4 years of teaching experience as a lead teacher and 1 year as a teaching assistant, all at the current context. Jessica was a teaching assistant in the second grade for a year and then a lead teacher in second grade for a year. She taught third grade for 2 years previously; this was her first time teaching fourth grade. Jessica was part of an alternative teacher training

program called Urban Teachers Center. The requirements of the Urban Teachers include completing 2 years of graduate coursework, teaching full time in the classroom with one year as a teaching assistant and one year as a lead teacher, and a commitment to staying in the classroom for a total of 4 years. At the end of the 2 years, a master's degree is awarded. During the 2 years, she was also working on gaining her teaching license and certification. As part of Urban Teachers Center, Jessica completed her roles as a teaching assistant and lead teacher for 3 years with coaching support. After the 3 years, she continued to be a lead teacher at the current school but without coaching from Urban Teachers Center.

Jessica's classroom included individual student desks, a carpet area, a whiteboard, a semicircle table, and a classroom library. The classroom setup in Jessica's room varied depending on the lesson. Student desks had different formations: pushed together to form groups or arranged in a circle, semicircle, or individual rows. The carpet was in front of the whiteboard. The semicircle table was in the corner. The semicircle desk formation was used for small group and one-to-one instruction. The classroom had large windows that lined one wall.

Measures of Instrumentation

This section describes the different measures used in this study: a self-efficacy scale, coaching cycle field notes, the researcher's journal, student reading levels, teacher interviews, and fidelity of implementation.

Teacher Sense of Efficacy Scale. The Teacher Sense of Efficacy Scale–Long Form was used to measure teacher self-efficacy. The survey is considered to be a reliable and valid instrument (Tschannen-Moran &Woolfolk Hoy, 2001; see Appendix B). This scale includes 24 questions that target three subcategories: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. A sample question for the Instructional

Strategies subscale is: “How well can you respond to difficult questions from your students?” A sample question for the Classroom Management subscale is: “How much can you do to control disruptive behavior in the classroom?” A sample question for the Student Engagement subscale is: “How much can you do to get through to the most difficult students?” The teachers were asked to rate themselves using a scale from 1 (*nothing)* to 9 (*a great deal*).

Demographic survey. The teacher demographic information requested included participants’ gender, age, ethnicity, years of experience, and education level. The demographic survey was included with the pre-intervention Teacher Sense of Efficacy Scale (Tschannen-Moran &Woolfolk Hoy, 2001).

Coaching cycle field notes. Coaching cycle field notes included observations of teachers’ lessons and notes from preplanning and debrief meetings. For the debrief meeting, the form was divided into four sections that mirror Bandura’s (1977) theory of self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and emotional arousal (see Appendix K). Coaching cycle field notes were used for both teacher self-efficacy and fidelity of implementation related to dose, adherence, and quality of service.

Peer Assisted Learning Strategies checklist. A PALS checklist was used during each observation to measure fidelity of implementation. The PALS checklist had six sections and 20 items (see Appendix L). The sections are the introduction, the four main instructional activities of PALS, and the wrap-up, which includes two questions that rate teacher practice. Sample items include rating how well the teacher implemented the instructional activities and how well the teacher monitored the students.

Researcher’s journal. I kept a researcher’s journal where I documented events as well as my reflections. I took notes after each coaching session to record fidelity of implementation. The

researcher's journal helped me self-disclose my assumptions and beliefs in the study (Brantlinger et al., 2005). I collected information about specific discussions and their context, such as the teacher's mood during the coaching sessions, as is critical in case study research (Baxter & Jack, 2008).

Student reading levels. Two assessments were given to measure each student's reading levels. Fountas and Pinnell (2010) reading assessments evaluate English reading levels in the areas of reading accuracy, fluency, and comprehension. The reading levels range from Level pre-A to Level Z. By the end of third grade, students should be reading at Level P. The assessment is administered one-on-one. A teacher listens to a student read the text. While the student reads the text, the teacher marks every word on the sheet. The teacher is required to give a check if the word is read correctly or note if the word was skipped or read incorrectly. If the word is read incorrectly, the teacher writes down the word the child said. A student must reach at least 95% accuracy to be considered an on-grade level reader. The reading portion is timed so that fluency can be calculated. Fluency is the number of correct words read in a certain amount of time. Once the child is done reading, the teacher verbally asks comprehension questions, which are then scored according to a rubric.

The EDL2 (Beaver & Carter, 2006) assessment measures Spanish reading levels in the areas of reading accuracy, fluency, and comprehension. The EDL2 levels are numeric and range from Level 1 to Level 44. By the end of third grade, students should be reading at Level 38. The administration and format of ELD2 is the same as Fountas and Pinnell as described above. A conversion chart developed by Fountas and Pinnell equates the levels between these two measures.

Teacher interviews. All interviews used a semistructured interview protocols (see Appendix M and Appendix N). Teacher interviews were structured to explore teachers' perspectives about their instructional practice with dually identified students, the coaching cycles following a 1-day professional workshop, and their teacher self-efficacy. Both interviews had a script to introduce the content of the interview.

Interview One. The first interview had 10 questions. The first three questions asked how the teachers implemented PALS. The next set of questions asked the teachers to describe their instructional practice and share their experience coaching cycles and the 1-day PALS training workshop. The rest of the interview asked about teacher efficacy and student reading achievement. An example of a question that asked about teacher efficacy is: "How, if at all, has your confidence regarding teaching dually identified students changed as a result of your involvement in the intervention? Please give an example or two that supports your response."

Interview Two. The second interview had four sections. The first part of the interview asked questions about the implementation of PALS. The second section asked about teacher self-efficacy. To gain perspective on self-efficacy, teachers were asked questions such as: "How, if at all, has your sense of responsibility changed in supporting dually identified students to reach their goals in reading?" The next two sections asked teachers to explain their beliefs about dually identified students and special education. The last section asked teachers to share their instructional practices and how these instructional practices relate to teaching dually identified students. Beyond the scripted questions, I asked questions to either clarify or have the teacher expand on what was said during the interview. A sample follow-up question was: "Can you explain that a bit more, when you referred to growth mindset?" To gain perspective on teacher

practices, I asked questions such as: “What changes in teaching practices, if any, have you made because of your involvement in the intervention?”

Procedure

In this section, I describe the intervention and data collection and data analysis procedures. A summary matrix can be found in Appendix O. The summary matrix outlines the research questions, constructs, measures, and data analysis methods.

Intervention

The focus of the coaching cycles was PALS, a reading program that was to be implemented schoolwide. PALS was introduced to the faculty because school administration sought a single reading program for use in all classrooms. The implementation of PALS was not enforced, however, and most teachers decided to continue with their current practices.

Subsequent to the 1-day PALS training workshop, I approached teachers about follow-up coaching cycles. The study was intended to be open for all second- through fifth-grade teachers, but due to administration constraints, only second-, third-, and fourth-grade teachers were asked to participate. Of the four second- and third-grade teachers, all declined to participate in the study other than one third-grade teacher. Of the four third-grade teachers, two declined to participate, one was being asked to leave her current position, and one agreed to participate. Two female elementary school teachers, Karen and Jessica (pseudonyms), who chose to implement PALS agreed to participate in this study.

During the intervention, I provided coaching cycles for two general education teachers following the 1-day PALS training workshop to target the reading achievement of dually identified students. One third-grade teacher and one fourth-grade teacher received six coaching cycles from October 2016 to March 2017. Each coaching cycle took place over a 2-week period.

Each participant met with me for coaching the first week and then implemented the feedback during the following week. The coaching cycles included three components: a pre-observation meeting, a lesson observation, and a debrief meeting.

Pre-observation meeting. Each coaching cycle began with a one-on-one pre-observation meeting that lasted 15–25 minutes and took place during the teacher's planning time. The teacher had the opportunity to ask questions about the upcoming PALS lesson, what she wanted to achieve, or request any support that might be needed. I then focused on reviewing the goals from the previous coaching cycle with the teacher. There was time allocated at the end of the session for the teacher to discuss other concerns about her teaching practice, particularly as it related to dually identified students.

Lesson observation. Following the pre-observation meeting, I conducted an observation of the teacher during a PALS lesson. The duration of the observations was 15–60 minutes, depending on the lesson. Teachers modified and shortened some lessons to fit the lesson into the day's schedule. The observations took place during the classes' reading block. Third grade had reading early in the morning, and fourth grade had reading mid-morning. I sat in the back of the classroom during the observation and noted the teacher's fidelity of implementation and any areas of strength and/or growth by using a PALS checklist and taking field notes. Once the students moved on to partner reading, I circulated around the room to examine how the students were reading and interacting.

I also noted how the teacher interacted with the students. I took notes on teacher practice, such as instructional strategies, classroom management, and how the students were engaging with the lesson and interacting with the teacher. Specifically, I noted whether students were on-task and participating during the whole-class lessons and the partner reading. I focused on the

goals that were set with the teacher. For example, in one meeting, Jessica had a goal of using more visual aids, such as a printed schedule to remind students of the PALS lesson routine. During the next lesson observation, I specifically noted that Jessica provided a printed schedule to the students.

Debrief meeting. After the lesson observation, a debrief meeting was set. The debrief meeting was conducted after school and lasted approximately 15–30 minutes. During the debrief meeting, I took field notes about the conversations between the researcher and teacher. I began each meeting by asking the teacher to reflect on the lesson. Specifically, the teacher was asked about what went well and what she perceived as an area of future potential growth. Next, I reviewed the notes from the observation with the teacher. I focused on giving feedback on how the teacher was progressing toward the goals that were set in previous meetings. I also gave feedback on lesson implementation and teacher practice. I used open-ended questions to provide an opportunity for the teacher to reflect and set her own goals for the next session. Time was allotted for the teacher to voice any other questions or concerns about her instructional practices as they related to dually identified students or PALS implementation.

Data Collection

In this section, I describe the data collection for each data source, which includes surveys, coaching cycle field notes, the researcher's journal, student reading levels, and teacher interviews (see Table 4.1). A small amount of quantitative data were collected to support the qualitative data. Both sets of data were collected at the same time, and both sets of data were examined collectively to determine findings.

Teacher Sense of Efficacy Scale. Both teachers completed the Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001). The surveys were sent through

school email using Google Forms, an online survey tool, and submitted directly to me. The survey was sent pre- and post-intervention. Each teacher was assigned a pseudonym, so teacher data could be de-identified but still be triangulated. The participants had 1 week to respond. Participants' responses were entered into a spreadsheet on a password-protected computer.

Table 4.1

Data Collection Timeline

Activity	Timeline	Description
Pre-survey	October 2016	Teachers completed a Google Forms survey.
Coaching cycles	October 2016–March 2017	I took notes during the pre-observation meetings, lesson observations, and debrief meetings.
Post-survey	April 2017	Teachers completed a Google Forms survey.
Interviews	June and August 2017	I conducted two individual interviews with each participant.
Student reading levels	September 2016–October 2016 and May 2017–June 2017	I collected student reading levels from the school's database.

Demographic survey. The demographic survey was sent through school email, using Google Forms, along with the pre-intervention Teacher Sense of Efficacy Scale (Tschannen-Moran &Woolfolk Hoy, 2001). The participants had 1 week to respond. Participants' responses were entered into a spreadsheet on a password-protected computer.

Coaching cycle field notes. In every coaching cycle, field notes were collected during the lesson observation. Observations of teachers' implementation of PALS were scheduled with teachers ahead of time. During the one-on-one coaching sessions, the participant and I discussed observations about the teacher's instructional practices, implementation of PALS, and their

confidence in teaching. The coaching cycle field notes helped determine fidelity of implementation.

Peer Assisted Learning Strategies checklist. Throughout each lesson observation, I used the Peer Assisted Learning Strategies checklist to note which PALS components were being implemented.

Researcher's journal. I kept a journal in a spreadsheet on a password-protected laptop. I took notes in the journal after each coaching session and documented events of the meetings. This journal was used to keep track of participant attendance for each component of the intervention. I also reflected on each coaching session regarding participant's comments about PALS and dually identified students, as well as the participants' responses to feedback. I also kept a log of codes used during data analysis.

Student reading levels. The Fountas and Pinnell (2011) and EDL2 (Beaver & Carter, 2006) reading assessments were administered in a one-to-one setting as part of the school's regular data collection cycle that occurs three times a year, at the beginning, middle, and end of the school year. Students' beginning-of-year and end-of-year Fountas and Pinnell and EDL2 reading levels were collected from the school database. I entered these data into a spreadsheet that was on a password-protected laptop, and each student was assigned a number so as to anonymize the data.

Teacher interviews. Each teacher participated in two individual interviews. The first interview was conducted after the coaching cycles were concluded. After analyzing the first interview, a second interview was conducted to obtain more targeted information from the participants. These interviews were semistructured, audio recorded, and transcribed. I conducted

the interviews at a time and location convenient to the participant and took notes about what was said in the interview.

Data Analysis

Qualitative and quantitative data were analyzed independently. The results of each set of data were then triangulated to gain insight on answering the research questions.

Qualitative data analysis. Theoretical thematic analysis (Braun & Clarke, 2006) was used to analyze the qualitative data. Interviews were analyzed first, followed by the coaching field notes. The researcher's journal was also analyzed to verify and triangulate findings from the two main qualitative data sources, using the following process.

First, I read the data several times to become familiar with the data (Braun & Clarke, 2006). During this process, I underlined units of data and assigned a code to each unit of data. I established a codebook that defined the codes (Saldaña, 2008). Next, the codes were sorted into the larger themes. After each round of coding, I updated and redefined the codes in a systematic manner to make meaning of the data (Saldaña, 2008). After several rounds of coding and categorizing, the codes become more refined and themes were developed, named, and defined.

Quantitative data analysis. Descriptive statistics were used to examine teacher self-efficacy scores from pre- and post-intervention surveys for each teacher. Due to the small sample size of two participants, each question was compared to note any trends in teacher self-efficacy. Descriptive statistics were computed for both pre- and post-surveys for each participant.

Descriptive statistics were also used to compare students' beginning-of-year and end-of-year reading levels in English and Spanish. The beginning-of-year reading levels were considered pre-intervention, and end-of-year reading levels were considered post-intervention. Each student's beginning-of-year reading level was compared to his or her end-of-year reading

level, based on the number of levels a student increased. Additionally, the overall class mean of number of levels progressed was calculated. The mean beginning-of-year and end-of-year reading levels in both English and Spanish were determined for the whole class. Also, the mean number of levels progressed was calculated for dually identified and non-dually identified students. The mean number of levels progressed was compared between the dually identified and non-dually identified groups.

The fidelity of implementation was analyzed based on review of coaching field notes and the researcher's journal. A percent was calculated for the fidelity checklist done at each observation, as well as a mean across all coaching cycles.

Trustworthiness and Credibility

Qualitative researchers need to establish trustworthiness. Trustworthiness can be defined as "the degree of confidence in data, interpretation, and methods used to ensure the quality of a study" (Connelly, 2016, p. 435). Trustworthiness establishes that the findings of a qualitative study can be trusted (Brantlinger et al., 2005). Trustworthiness can be established by ensuring that the findings are credible, dependable, confirmable, and transferable (Lincoln & Guba, 1986).

Credibility can be defined as the "confidence in the truth of the study" (Connelly, 2016, p. 436). To ensure that the study has credibility and trustworthiness, I engaged in credibility measures by triangulating data, which means to "search for convergence of, or consistency among, evidence from multiple and varied data sources" (Brantlinger et al., 2005, p. 201). I gathered evidence and data from multiple sources such as observations, interviews, surveys, and reading levels to establish common themes (Baxter & Jacks, 2008). Another credibility measure was coding in a systematic and meaningful way multiple times (Brantlinger et al., 2005).

Dependability refers to the reliability of a qualitative study (Shenton, 2004). If a study is reliable, it can be replicated in a similar context with similar participants and methods and consistent findings. The contexts of qualitative studies often change, however, and dependability in a qualitative study means to capture the changing conditions in the context of the study and research design (Shenton, 2004). Dependability was addressed in this study by documenting the research process at length, including the changes in context and research design (Shenton, 2004).

Confirmability means that the findings of the study are from the participants, rather than the preferences of the researcher (Shenton, 2004). The extent to which the researcher states her own biases is an important criterion for confirmability, and the researcher accomplishes this by stating her positionality (Miles & Huberman, 1994). Direct quotes from the participants were used to establish the confirmability of the findings.

Transferability establishes evidence that the findings could apply to other contexts, but due to the nature of qualitative studies, one cannot prove that the findings will be transferable (Shenton, 2004). Researchers should provide thick descriptions of the context and detailed descriptions of the participants so comparisons can be made to see if findings might be applicable (Shenton, 2004). I provided thick and detailed descriptions by using direct quotes and field notes to support findings (Brantlinger et al., 2005).

These strategies were used to establish trustworthiness and credibility, which is important to a case study (Yin, 2003). Because I was both an instructional coach and researcher in this study, I kept a researcher's journal to record participants' responses and my own reflections, which were inherently influenced by my positionality.

Researcher Positionality

I need to disclose my role and positionality because I was the researcher as well as part of the context of the study. Researcher positionality can be defined as one's world view and the position they hold within the study (Bourke, 2014) and is a credibility measure in qualitative studies (Brantlinger et al., 2005). Disclosing researcher positionality helps validate the findings and establish the trustworthiness of a study (Bourke, 2014). Researcher positionality makes the researcher aware of his or her own views and values in relation to the research, which could limit potential bias and appropriate analysis of the data (Bourke, 2014).

I was the director of special education for 3 years at the study setting, meaning I designed and implemented special education programming. For the past 2 years, however, I have been in a non-evaluative role as an instructional coach for special education. This role was different from the instructional coach roles that were in place during the needs assessment study and was created because there was a need for an experienced special educator to work across the grade levels. I have coached special education and general education teachers on inclusive practices and how to best support students with IEPs. I planned and delivered schoolwide and grade-level specific professional development sessions and worked closely with the other coaches in the school in regard to curriculum and instructional practices.

As part of my role in the school, I coached both participants in this study. I have approximately 12 years of experience in special education and have been coaching for 3 years. My training as an instructional coach includes attending annual coaching institutes and workshops that were hosted by outside organizations. I had access to the trainer that facilitated the 1-day PALS training workshop for any concerns or questions about how PALS should be implemented.

The current study reflects my professional and personal experiences in education. I have often observed that dually identified students do not receive the support they need in the general education classroom. In my personal experience, teachers often do not receive the support and tools needed for teaching dually identified students. I often hear teachers talk about how they feel like they are not able to support dually identified students. These beliefs and lack of support that teachers have in teaching dually identified students is likely a factor in academic outcomes for dually identified students. As an instructional coach, I perceived a need for a focused, comprehensive professional development experience that is individualized to the teacher. These combined factors have driven the researcher to further investigate professional development, teacher efficacy, and dually identified students.

Chapter 5

Findings and Discussion

In this study, I examined the relationship between general education teachers' exposure to coaching cycles and their self-efficacy in regard to teaching reading to dually identified students. I also examined students' reading levels and teachers' perceptions of their practice after completing coaching cycles. Qualitative data sources were pre-observation meeting notes, lesson observation notes, debrief meeting notes, researcher's journal, and teacher interviews. The quantitative data sources, teacher surveys, and student reading levels were analyzed using descriptive statistics to support the qualitative data analysis. The findings of this study are framed using the interconnected model for professional growth (Clark & Hollingsworth, 2002). As discussed in Chapter 3, this model views teacher growth as a complex process rather than a linear progression. Following an overview of the implementation of the coaching cycles, the findings are arranged by research question and aligned with the corresponding domain of the interconnected model of professional growth (i.e., external domain, personal domain, domain of practice, domain of consequence). I conclude the chapter with with limitations and implications for research and practice.

Findings

The intervention took place after a schoolwide 1-day PALS training workshop and consisted of six coaching cycles that spanned from October 2016 to March 2017. I met with the two participants prior to implementing the intervention to establish the structure of the coaching cycles. I also used the 1-day PALS training workshop presentation packet to review the PALS program and asked participants whether they had any unanswered questions before starting the

intervention. I made changes to the planned intervention due to unforeseeable circumstances in the context of the study, which will be explained in the Discussion section.

Coaching Cycles: Karen

Karen completed two full coaching cycles out of six. She attended five out of six pre-observation meetings but did not complete lesson observations and corresponding debrief meetings (see Table 5.1). During the study, Karen was under a performance review with the principal. As part of her performance review, she was required to participate in supervision coaching with another coach. Due to the supervision coaching sessions, Karen often had to shorten the length of the pre-observation meetings in order to attend mandated supervision coaching sessions.

The pre-observation meetings were designed as a time to discuss any questions, concerns, goals, and establish a focus for the lesson observation. During each meeting, I asked Karen what she wanted me to look for during her lesson observations, but Karen did not prepare a focus for three of the meetings. She often asked for generic feedback, or how she was doing generally. When she did ask for my advice, it was often about behavior of students and her frustrations with the school. In one pre-observation meeting, Karen asked for my help in addressing the behavior issues of a particular student and how to pair reading partners based on behavior. In another pre-observation meeting, she spoke at length about her formal observation and performance review with the principal. She relayed that she scored poorly, and she felt unsupported at the school. Karen often expressed that she was feeling overwhelmed and wanted to discuss how to make time and space for PALS within the current curriculum. When discussing possible ways in which PALS could be included, Karen often responded to my suggestions with barriers to that as a solution. For example, when discussing how best to assign students as reading partners, Karen

would talk about “the opposition that students felt toward reading with assigned partners” (Individual Interview, p. 2).

Table 5.1

Karen’s Coaching Cycles

	Pre-Observation Meeting	Lesson Observation	Debrief Meeting
Coaching Cycle 1	Canceled by Karen due to meeting with principal	Canceled by Karen due to student behavior	Not applicable
Coaching Cycle 2	Debriefed performance review meeting; reviewed manual and lessons	Canceled by Karen due to her leaving early for the day	Not applicable
Coaching Cycle 3	Shortened by Karen due to supervision meeting; reviewed lessons and prepared materials	Canceled by Karen due to student behavior	Not applicable
Coaching Cycle 4	Shortened by Karen due to supervision meeting; reviewed lessons and prepared materials	Canceled by Karen due to technology difficulties	Not applicable
Coaching Cycle 5	Discussed how to pair reading partners based on student behaviors	Did not address student misbehavior during partner reading	Stated hesitancy about class readiness for partner work; wanted another teacher in the room; discussed goal of stopping and reviewing each step
Coaching Cycle 6	Discussed how to shorten lessons to fit time constraints; reviewed goal of modeling	Followed script; stopped and reviewed each step of partner reading	Stated that the lesson went better than expected; reviewed goal of stopping and reviewing with students

Karen canceled four of the six lesson observations (see Table 5.1). The most often cited reason for cancelation was student behavior. Karen reported that she had a child with extreme behaviors that were dangerous and had to cancel PALS lessons to either address the behavior with the student or to address the behavior with the class. For one lesson observation, Karen

stated that she was not able to implement the lesson due to technology not being available. The teacher was planning on using a document camera to project the lesson materials and had not prepared a contingency plan.

During the lesson observations, I observed that Karen would implement the PALS lesson as planned, but she did not address student behavior. For example, when a student was wandering around the room, she did not redirect the student back to the task. During the last lesson observation, I noted that students were more on task and engaged with the lesson. I observed that Karen stopped the lesson to ask students to repeat the directions back to her, as suggested in a previous coaching cycle. I also observed Karen using a visual checklist, as suggested.

During debrief meetings, when prompted to reflect on the lessons, Karen would often comment on students' actions and what she thought of the students' behavior rather than her instructional practice. Karen consistently voiced that an extra person in the room would have been helpful. She said that she was glad to start PALS, but she also thought that the class might have not been ready, as the behavior was not what she had expected. However, after the last lesson observation, Karen reflected that the "lesson went better than I thought it would" (Debrief Meeting 6).

In the pre-observation meeting for the fifth debrief meeting, I focused on goals that were immediately actionable, as there was only time for one more coaching cycle, and I wanted to help her feel successful. The goals that we agreed upon were incorporating checks for understanding in the lesson, which might help with supporting classroom management, and providing visual aids for students to follow. By the last debrief meeting, Karen reported that "it was good to get started and see the students actually reading" (Debrief Meeting 6). She

acknowledged that she had been not consistent with PALS implementation and the coaching cycles. Karen voiced that now that PALS has started, she would like to continue as much as she can.

Coaching Cycles: Jessica

Jessica attended all six coaching cycles. Unlike Karen, Jessica had often considered a specific focus for the lesson observation prior to our pre-observation meetings. The foci were often about student engagement, participation, and independence during the lessons, and changes to reading partners based on reading growth, behavior, and engagement. Jessica expressed interest in how students were engaging with the PALS tools such as the coaching checklist. Another frequent topic of discussion during pre-observation meetings was how to incorporate a full PALS lesson into the school day. Jessica voiced that there were always competing priorities such as preparation for standardized assessments and schoolwide celebrations. Jessica was open to suggested solutions about how to integrate PALS including using PALS activities to test prep or using PALS activities for a book club lesson. Jessica and I agreed to shortened PALS lessons or to integrate PALS activities and strategies within the larger curriculum (see Table 5.2).

During the lesson observations, I observed Jessica implementing the goals discussed in each pre-observation meeting as well as maintain goals set in previous coaching cycles. For example, one goal for Jessica was to use students as a model. Once she used students to model a PALS activity, she used students as models during each lesson observation after that. I observed Jessica consistently praise students when expectations were met or give specific redirections when student were off task. Most students were engaged in the lesson and independently participating in the PALS activity. I observed students following along in the text as their partners read and saying “check it” when their partner made an error (Lesson Observation 6). I

observed students who had struggled with social interactions in the past and were now able to stay on task by following the PALS checklist. During the last two lesson observations, I observed Jessica ask students to reflect on their own learning during PALS to prompt them to be more aware of who they are as learners.

Debrief meetings always started with Jessica's reflection on how the lesson went. Jessica would often talk first about what she thought went well and then what needed to be improved. She also asked for feedback on student engagement each time and commented that having "an extra of set eyes" is helpful (Debrief Meeting 3). During the debrief meetings, Jessica often commented that the feedback was helpful as it gives her "something specific" to work on (Debrief Meeting 1). For example, we spoke about how to end lessons in a way that enables students to review or debrief what they learned instead of just ending the lesson. Some goals were revisited based on Jessica's reflection about what still needed improvement. For example, the goal of one lesson observation was the use of different-level texts. After the lesson, Jessica reflected that she only provided a variety of leveled texts for that specific lesson and wanted to make sure that it is a strategy she uses consistently, so she requested that goal be revisited.

A frequent topic of discussion during our debrief meetings was about holding students accountable. In several debrief meetings, Jessica mentioned how students were taking responsibility for their learning. Jessica also wondered aloud about how to support student learning by scaffolding in PALS lessons for students with low academic achievement. For example, in the fourth debrief meeting Jessica said, "Some pairs need more scaffolding, such as using easier texts". Discussion of different strategies to use, such as visual posters of PALS activities or sentence starters, also occurred during debrief meetings.

Table 5.2

Jessica's Coaching Cycles

	Pre-Observation Meeting	Lesson Observation	Debrief Meeting
Coaching Cycle 1	Reviewed manual and student pairings; requested feedback on engagement between partners using PALS strategies	Students used checklist; students needed some prompting to correct errors; modeled for students	Reflected that students were focused, engaged, and able to paragraph shrink; discussed using student modeling to foster independence and changing partners for better engagement
Coaching Cycle 2	Discussed how to integrate PALS with curriculum and test preparation; reviewed goal of student modeling and student independence	Called a pair of students to model after teacher model; partners corrected each other; used specific language to praise following expectations	Discussed her growing confidence; used student to model on-task discussion, students' on-task behaviors and independence; chose goal of differentiating by texts
Coaching Cycle 3	Discussed how to integrate mandated texts and how to review the learning target or use a warm-up activity to access prior knowledge	Used different-level texts for partners; reminded students about routine by modeling with student; reviewed PAL routines at the end of the lesson	Discussed explicitly reminding students to use correction card; chose goal about need to review routine more often
Coaching Cycle 4	Discussed using PALS during book club and goal of reviewing PALS routine	Reinforced partner reading by using student modeling; had students lead the lesson; lesson shorted due to schoolwide celebration	Reflected that students were reading together and following routines; discussed keeping scaffolds and providing different-level texts
Coaching Cycle 5	Reported greater comfort with PALS; reviewed goal of using different-level texts	Matched texts by level and student interest; reviewed routine with student as model; asked students to reflect on next steps	Reflected on students' independence and use of different-level text/interest; discussed using probing questions during lesson wrap-up and a visual poster for PALS steps
Coaching Cycle 6	Discussed modifying PALS to fit into the class schedule; reviewed goal of using visual poster and reflection	Used sentence starters and visual poster to scaffold; students modeled PALS routine; asked students to reflect on their partner engagement	Discussed how visual poster and different-level texts can be used across subjects; reflected how PALS structure supports social skills and students' independence and how to modify PALS moving forward

The issues of time and how to integrate PALS were other frequent debrief meeting topics. Jessica commented that she wished there was more time to implement PALS but was glad that she was able to implement as least some of the lesson components. Jessica stated, "It is definitely helpful. I know it is not exactly [as it should be be] but it is better than not having it" (Debrief Meeting 2). By the end of the coaching cycles, Jessica voiced that she felt more comfortable with PALS as an intervention and that she was able to fit PALS into the class schedule when she modified it.

External Domain: Research Questions 1 and 1A

The first research question has two parts, with both parts aligning with the external domain, or an external source of information (Clarke & Hollingsworth, 2002). Research Question 1 sought to establish how teachers of dually identified students experience coaching cycles following a 1-day professional development workshop. The external domain provides a mechanism to examine how an outside source of support and information interacts with the other domains that are in the teacher's world (Clarke & Hollingsworth, 2002). The coaching cycles, specifically the debrief meetings, allowed the teachers to reflect on what was helpful to them as learners.

Karen. When asked about her experience with the 1-day PALS training workshop, Karen responded that she thought that the "initial training could have been stronger" (Individual Interview 1, p. 2). She shared that the 1-day PALS training workshop did not use enough modeling to engage her. For example, when asked how she would have designed the 1-day PALS training workshop, she said that she would have liked to "see a video of students doing each of the parts, since there aren't that many parts" (Individual Interview 1, p. 5). Karen also mentioned that the presenter's insistence about fidelity of program implementation made Karen

feel less engaged. She said, “I thought that I had to be very strict and rigid about having fidelity to the program. The downside to that is that I didn’t end up engaging with the program as much as I could have” (Individual Interview 1, p. 2). Karen viewed the 1-day PALS training workshop as ineffective in engaging her as a learner and active participant. Karen explained that she would have engaged more with the program “if I had felt like there was room to make mistakes or experiment with the materials” (Individual Interview 1, p. 2).

When asked about the coaching cycles, Karen reported that she “had competing coaching process[es] going on,” which was “not helpful” (Individual Interview 2, p. 1). She explained the differences between the two different coaching cycles. The other instructional coach was provided by the school administration to support Karen in dealing with the extreme behaviors in her classroom. Karen stated that when she shared her goals pertaining to PALS, the other coach “respected it [PALS implementation] in word but not in spirit” (Individual Interview 2, p. 5). This left Karen with conflicting priorities. Karen also had extra meetings with the principal to review her performance at the school, which decreased the time available for her to devote to PALS implementation. Karen completed only two full coaching cycles out of the six offered. She attended five of the six pre-observation meetings.

Karen did report, however, that coaching cycles were helpful in getting her ready to start PALS and that she found the feedback useful. For example, during a debrief meeting, feedback was given about the use of visual representations to support student learning during a coaching cycle, and Karen responded to this feedback by using visuals in the following observed lesson. Even though Karen reported that there were conflicting priorities between the two different coaching cycles, Karen was able to act upon the PALS-specific feedback.

Another reason Karen gave for feeling strained by the coaching was the lack of support from administration, as she stated that she would have liked "more explicit proof that it [PALS] was supported by the administration" (Individual Interview 1, p. 5). In her interview, she talked about how she would have liked to have direct assurance from the principal that implementing PALS was supported. She said, "The only thing that could have helped is if you were able to communicate with the principal or with my [other] coach in a way where I would have known for a fact that it was safe for me to take a 20-minute block and have my whole group do it." (Individual Interview 1, p. 5). Karen acknowledged that PALS had been approved by the administration, as the school held the 1-day PALS training workshop; however, she still felt unsupported by the administration. The 1-day PALS training workshop and coaching cycles would likely have benefitted from administrative support to create an environment more conducive to learning and risk-taking.

Jessica. Jessica provided a different perspective on the 1-day PALS training workshop and coaching cycles. Jessica shared that she thought the 1-day PALS training workshop was a great workshop, and "it got her excited about it [PALS]" (Individual Interview 1, p. 6). For example, she explained, "I felt like I was prepared to the start the next day. Everything I needed was there in the CD-ROM and the book. That was great." (Individual Interview 1, p. 6). Jessica viewed the coaching cycles as "the biggest support" to her in implementing the program after the 1-day PALS training workshop (Individual Interview 2, p. 1). In her second interview, Jessica spoke about how, after getting feedback after a lesson observation, she appreciated:

> …getting input on what I thought my strengths and challenges were. Hearing my coach tell me about the strengths and challenges and setting a plan for what I want to focus on next, so the coach could look at that. That was very helpful, and it [the feedback] helped

> me zoom in on one specific aspect at a time of PALS, or implementing PALS, or management of PALS, and helped me improve on that without feeling overwhelmed. (Individual Interview 2, p. 1)

During her first debrief meeting, Jessica also shared that feedback "helps me [her] to focus on what I [she] needs to work on." In the second debrief meeting, Jessica shared that she "looks forward to your [the coach's] feedback because there is always something to improve on." Jessica shared that watching the coach interact with the students "remind[ed] me that I can be more positive with the kids and turn it [the behavior] around" (Debrief Meeting 1). This comment by Jessica shows how coaching can be a structure in which observing the coach could be an additional, and unintended, type of support.

The coaching cycles also helped Jessica to continually engage with PALS, noting that the coaching cycles "keep[s] me motivated to keep this up" (Debrief Meeting 4). The coaching cycles also helped her see that there are possibilities in integrating the program because "it is easy to lose it [focus] since there is always so much going on" (Debrief Meeting 4). Jessica shared the same the sentiments as Karen in regard to administrative support. Jessica commented that she enjoyed receiving feedback on PALS, but she is doubtful if she would have gotten any PALS-specific feedback if she had not agreed to the study. In her first interview, she stated, "If I had not been doing this project with you, I don't know if I would get any feedback" (p. 2). She shared her perspective on how administration approached implementation of PALS:

> I don't think there's anything set up in the school to visit classrooms specifically for an eye on PALS since it's a new program: "How's it working? Can it work in our system of learning? What are some changes you need to make to make it work?" Because I'm sure it was an investment for the school . . . I don't know how many people know that I do it,

besides you. I don't even know how many teachers use the book. I know everyone got a book. I don't know how many funds were wasted here. (Individual Interview 1, p. 2)

During her first interview, Jessica expressed that administration had invested time and money into the PALS program but had not thoroughly planned the implementation process. Besides coaching support, the teachers voiced that administrative support is also necessary for successful implementation.

Teacher Participation. Research Question 1A sought to determine fidelity of implementation by examining teacher participation in the coaching cycles. Teacher participation in the study was varied. In some instances, there was high fidelity and, in others, low. Both teachers attended the 1-day workshop as planned, leading to fidelity of 100%. All six coaching cycles were offered to both teachers, but teacher attendance for coaching cycles, was varied.

***Karen*.** Karen attended two of the six coaching cycles which yielded 33.3% fidelity. She attended five out of six pre-observation meetings (see Table 5.1). Throughout the study, Karen canceled the meetings due to various difficulties she was experiencing, such as required meetings with the principal about job performance, extreme student behavior, and personal reasons. Due to her job performance review, she was required to attend supervision coaching sessions, which often limited her available planning time and time to engage with the intervention. During lesson observations, Karen implemented the introduction and wrap-up according to the PALS structure. In one lesson, she implemented one PALS activity, in another lesson, she implemented two PALS activities. Karen expressed that it was difficult to fit the entire PALS lessons due to the many demands and priorities of the school.

***Jessica*.** Jessica attended all six coaching sessions, which yielded 100% fidelity in her attendance for all three parts of the six coaching cycles (see Table 5.2). During the lesson

observations, however, fidelity to PALS was varied. Jessica did not implement all the activities in a PALS lesson due to time constraints in the school schedule, however, she consistently implemented the introduction and wrap-up in every lesson. In four out of six lessons, she implemented one activity of PALS. In one lesson, she implemented three activities and in another she implemented two activities. Within each PALS activity, Jessica followed the PALS structure with 100% high fidelity. During pre-observation meetings, conversations with Jessica were often about how to implement the full program as there were too many demands placed by the school.

Personal Domain: Research Questions 2 and 2A

The interconnected model for professional growth suggests that teacher change occurs when the external domain interacts with the internal, or personal, domain. In the first part of the second research question, I sought to understand the relationship between the external domain and personal domain by focusing on the relationship between professional development (i.e., coaching cycles) and teacher self-efficacy. The second part of the research question targeted personal domain and its connection with the domain of consequence.

Research Question 2 sought to determine how teachers describe changes in their self-efficacy after coaching cycles following a 1-day professional development workshop. The Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) was given pre- and post-intervention to measure the teachers' self-efficacy when teaching dually identified students. Analysis of the survey responses provided an overall score as well sub-scores for categories including Instructional Strategies, Student Engagement, and Classroom Management. Based on the survey results, both teachers self-assessed with ratings that showed an increase in overall teacher self-efficacy. Karen had an overall mean score of 5.9 before the intervention and 7.9 at

the end of the study; Jessica's reported scores of 7.3 and 7.6 reflect a consistent positive sense of self-efficacy.

Teachers' beliefs about dually identified students and special education. The coaching cycles allowed Karen and Jessica to reflect on their beliefs about dually identified students, their role as general education teachers, and their beliefs about special education programming within their context. Both teachers voiced that their beliefs changed. Karen's beliefs were rooted in her desire to abide by what was mandated, and Jessica's beliefs seemed related to a strong sense of responsibility to her students.

***Karen*.** In the first interview, Karen was asked if there were any changes to her beliefs about dually identified students since the coaching cycles began. Karen stated that she has changed her beliefs about dually identified students "to some extent" (Individual Interview 1, p. 3). Karen expressed that she was surprised by dually identified students and their response to PALS:

> I was thoroughly surprised to see some of the ELL students who had an IEP. They seem to get really excited about the opportunities to read with an English leader [a native English speaker], and I don't think I had made that connection. I don't think I observed that [excitement] before. I think that one change that comes with using PALS is being able to see where a student with a different level of language development might feel more comfortable and having a stronger reader [read with them]. (Individual Interview 1, p. 3)

By "connection" Karen meant that she was not expecting dually identified students to get so much enjoyment by reading alongside a native-English-speaking peer.

Additionally, Karen revealed that most of her beliefs about special education were guided by legal mandates. For example, when asked about her views on special education, Karen referred to definitions in special education policies and how those indicate her responsibilities as a general education teacher in the least restrictive environment. Karen said her responsibility as the general education teacher was to have more communication with special education teachers about the students with IEPs. Karen stated that she needed "to make sure [she] was checking the IEPs" and "to advocate for more conversation" about the students' IEPs with the special education teachers at the school (Individual Interview 2, p. 8). This statement shows that responsibility for students in special education lies with the special education teacher as opposed to the general education teacher.

In response to a question about her views on inclusion of special education students, Karen explained that "when students are allowed to be mainstreamed [taught in the same room] with their fellow classmates, often with a special education teacher in the classroom with them, that is the ideal situation" (Individual Interview 2, p. 9). This statement about a specific inclusion model aligned with another statement she made about co-teaching. Karen said, "two instructors, or at least the possibility of having a second instructor, who is going to interact with that student" would be the best model for special education (Individual Interview 2, p. 2). Karen seemed to see a division of responsibility in the roles of the general education and special education teachers. She saw the special education teacher as supporting a student "both in the inclusion area and outside of the classroom for a quick target intervention or to oversee PALS" (Individual Interview 2, p. 2). This seemed to indicate that she did not, in an ideal situation, want PALS to be solely her responsibility.

Karen also discussed how her belief in special education is rooted "in terms of the history of education" and refers to how "special education research is to be able to put our fingers on which kinds of cognitive delays are permanent and [which can show] measurable change" (Individual Interview 2, p. 11). She shared that given the right conditions and environment, any child could succeed; however, Karen also spoke of the many barriers she encountered in fulfilling her responsibilities as a general education teacher.

Karen shared that one of the main barriers to the success of dually identified students at the school was the special education programming. She said that she "felt less empowered to support the [ELL] students who were seen as having more of an academic issue because they were pulled out constantly" (Individual Interview 2, p. 6). Karen also voiced that IEPs were not adequately reflecting student needs and expressed that the IEP goals were often limiting: "IEPs were pretty simple for some of the needs the kids were demonstrating" (Individual Interview 2, p. 6). An example of what Karen meant by a simple, or basic, IEP would be one with a reading goal that would have also been used for a non-dually identified students or a goal based solely on expected reading levels versus what the student could likely achieve within one school year. Karen also mentioned the lack of administrative support for teaching dually identified students:

> I think it would have been helpful if the administration would have been willing to hold regular dialogue about what we are seeing about this topic, especially since the school was working really hard to see inclusion as one of their successes. I think it would make sense to spend more time in open and honest discussion about the challenges. (Individual Interview 1, p. 6)

Overall, Karen voiced that her belief toward dually identified students had changed somewhat. Her beliefs seemed constrained to what was required of her by law, and she discussed many perceived barriers to teaching dually identified students.

Jessica. Jessica stated that her teacher self-efficacy toward dually identified students has grown since the intervention due to implementing PALS. When asked about how her teacher self-efficacy has changed, she replied, "It's grown because it's given me another solid research tool I can use" (Individual Interview 1, p. 3). Jessica's post-test ratings imply that she had higher self-efficacy at post-test than at pre-test. Her mean teacher self-efficacy score was a 7.3 at pre-test and a 7.6 at post-test.

As a general education teacher, Jessica said she believes that her responsibility is to teach and meet all student needs in her classroom. She believes that the general education teacher is responsible for supporting and differentiating for all of the students in the classroom so that they can access the general education curriculum:

> I have students that are above grade level, at grade level, below grade level. And then with that, students [who] have been identified with emotional issues, with academic issues, and students who have been identified as English language learning [sic]. So, my role is to provide the students with the support and scaffolding they need to reach whatever the target is for that lesson. (Individual Interview 2, p. 4)

Jessica believes that her role with dually identified students is to create "an environment where they do feel comfortable taking risks" and to "provide the support and materials necessary" to access reading (Individual Interview 1, p. 4). She believes that part of the learning environment is to provide strategies for students to use to become independent learners and for students to be comfortable in asking for help.

Jessica views "special education and general education teachers as partners" in teaching dually identified students (Individual Interview 2, p. 5). She stated that she sees the "special education teacher as a partner with an expertise to scaffold and support students [and] that can reach out to students" (Individual Interview 2, p. 5). She said that she tries to learn from the special education teacher so that she can implement the strategies and supports for students throughout the rest of the day. As a general education teacher, Jessica stated that she believes she has a strong sense of responsibility to dually identified students and can use PALS "seamlessly in the gen ed [general education] classroom, [and] you don't have to be pulled out to do this. Nobody has to know 'that's a student with an IEP' right here'" (Individual Interview 2, p. 7).

Teachers' reading self-efficacy. When determining how teachers describe their changes in their self-efficacy related to teaching dually identified students, participants also mentioned self-efficacy specific to reading instruction. The coaching cycles gave both teachers an opportunity to reflect on their beliefs about how much they are able to impact reading outcomes for students, as the debrief meeting component prompted teachers to reflect on their instructional practices.

Karen. When asked about teacher impact on students, Karen stated that "where there isn't an issue of classroom management, I think a teacher can impact a student tremendously" (Individual Interview 2, p. 5). She stated she believes that teachers should be aware of "the different domains [subject areas]" of students' learning and of "making sure those domains are interacting" (Individual Interview 2, p. 5). When asked about barriers to teachers having an impact on student learning, Karen mentioned classroom management. For example, she remarked, "If there isn't an issue of classroom management, if there is potentially an assistant

who can make sure classroom management is not an issue," that could allow the teacher to make an impact on student learning (Individual Interview 2, p. 5).

Karen also believed that school culture is a factor related to teachers' impact on student learning because school culture can influence how children learn and how children identify themselves as learners. She wondered, for example, "by third grade, whether or not [that] autonomy would keep certain students from pushing themselves to do more" (Individual Interview 2, p. 9). By "autonomy," Karen meant that students at the school were trusted to learn at their own pace, and she wondered whether that might keep certain students from pushing themselves to do more. Overall, Karen voiced a belief that teachers can have an impact on student learning if factors such as classroom management and school culture are not barriers.

Jessica. Jessica provided a different perspective on how general education teachers can impact learning for students. She said that the general education teacher has considerable influence on the learning outcomes of dually identified students. She shared that "a lot of it has to do with the [teacher's] mindset" (Individual Interview 2, p. 9). Jessica shared that teachers who are willing to learn, or teachers with a growth mindset toward dually identified students, will seek to understand how to support these students. She said, "that mindset alone is going to open a teacher up to seek special development, to be open to strategies" (Individual Interview, p. 9). She also shared that if teachers already have the "mindset like it [teaching dually identified student] is hopeless" then teachers will not take on the responsibility to learn more, which "can be a disadvantage for dually identified students" (Individual Interview 2, p. 9). Jessica shared that her growth mindset toward all her students is part of the reason that she is able to impact her students' learning. Jessica demonstrated her willingness to learn by consistently asking for and

implementing feedback during her coaching cycles, such as discussing scaffolding strategies to better support students who were struggling.

Jessica stated her belief that teachers need support in the form of professional development and coaching to have the maximum amount of impact. In her second interview, she explained, "With what I know now, I think I have some impact. I think I have some positive impact, and I can contribute somewhat to the growth [of my dually identified students]" (p. 3). She affirmed this belief by reporting the increase in her students' reading levels and confidence:

> And there is growth, so much that I had to switch partners around that really boosts—that one kid that became Partner A—it boosts their confidence. She went home and told her mom: "I'm now Partner A in my PALS partnership because I grew that much." There was so much growth with the reading levels, like, the confidence of reading and the pride they felt grew as well, which I feel is important. (Individual Interview 1, p. 4)

Although Jessica believes that she has had some impact, she also thinks that she could have had even more impact. She thought the "impact could be larger" if there was more "support for scheduling and support around professional development" along with coaching (Individual Interview 2, p. 3). Jessica also voiced that supports such as professional development should be "intentionally targeted," meaning specific to teaching dually identified students (Individual Interview 2, p. 3). She voiced that if she did not choose to participate in this study, she may not have been able to implement the PALS program and see the growth that she did within her students. "If I didn't sign up for this [the coaching cycle intervention], I might not have done PALS" (Individual Interview 1, p. 4). Jessica said that she felt that the impact would be much greater if the entire school used the PALS program, rather than just some teachers. From her perspective as a general education teacher, she has made an impact on the learning outcomes of

dually identified students, particularly on their confidence in reading and on their reading fluency.

Salient outcomes. Research Question 2A sought to determine the relationship between teacher self-efficacy and dually identified students' reading levels by targeting the salient outcome, or the domain of consequence, of students' reading levels. The interconnected model of professional growth suggests that salient outcomes highly influence the personal domain of a teacher (Clark & Hollingsworth, 2002). Implementation of the PALS program and the coaching cycles provided opportunities for teachers to reflect on student outcomes in the context of reading levels. Students' reading data were collected at the beginning and end of the school year**.** Overall, most students increased in their reading levels. However, there could be many possible explanations for this increase in reading levels. One explanation could be maturation; students will naturally learn and grow with time. Another explanation could be the schoolwide literacy curriculum that was being taught.

***Karen*.** In Karen's classroom, all 40 students increased their reading levels, and all six dually identified students increased by a mean of 12 levels. Comparatively, students who were not dually identified gained a mean of 7.5 levels; the expected growth for third grade is four levels. Once Karen had seen how PALS could help with student management, she stated that would have implemented the program earlier in the year if given another opportunity. In her response, she did not make a connection to student outcomes in terms of student reading levels but connected student outcomes to student behaviors such as taking turns during reading. For example, Karen stated that PALS "builds a culture of collaboration and cooperation between students" (Individual Interview 2, p. 11).

***Jessica*.** In Jessica's classroom, the results from the reading assessments show that all 42 students increased their reading levels and that all 11 dually identified students increased by a mean of 10 levels. In comparison, students who were not dually identified increased their reading by a mean of five levels; the expected growth for fourth grade is four levels.

Jessica shared that she views PALS as having an influence on student outcomes. During both interviews, she noted that her students had made gains in their reading. Jessica stated that "there was both growth with reading levels [and] confidence of reading" when asked about student outcomes in her class (Individual Interview 1, p. 4). Jessica described how she felt the change occurred with her students and that using prior knowledge of students is an easy way to support students' learning: "It doesn't take a complex intervention to make a change. . . It's very simple and it builds upon what students have" (Individual Interview 2, p. 4).

Jessica said that she believed her students would have made even greater gains in reading levels if she started PALS earlier in the year. In her first interview, Jessica shared that students made so much progress in their reading that she had to constantly change reading partners. She commented that it was encouraging to see students not only making progress but also how "students loved every activity I have taught through PALS" (Individual Interview 1, p. 7). She also shared that due to the clear structure and simplicity of PALS, she was able to "use it when I was doing extra tutoring in the mornings . . . it was an efficient strategy" (Individual Interview 1, p. 3).

Domain of Practice: Research Question 3

Research Question 3 sought to determine how teachers describe changes in their practice after coaching cycles following a 1-day professional development workshop. This question was related to instructional strategies, classroom management, and student reading levels.

Instructional strategies. Both teachers described changes to their practice as a result of the intervention and through implementing PALS in their classroom.

***Karen*.** Karen voiced that an intervention such as PALS can be used to support dually identified students:

> I would continue wanting to use the opportunities that come out of using PALS. I would want to use those opportunities to check in with the different students, and see what their different needs are and to use it as opportunity to differentiate more." (Individual Interview 1, p. 3)

Karen's statement shows her interest in using PALS strategies to help her practice grow in support of students. This aligns with her statement about how students enjoyed reading with each other, especially when one is a proficient reader. Karen viewed PALS as a way to provide ample opportunities for students to verbalize their thoughts because PALS is "getting [them] to verbalize a lot when they read, and then quickly start to process it and verbalize what they remember." (Individual Interview 2, p. 10)

Analysis of Karen's interviews and lesson observations revealed limited change regarding instruction strategies. For example, when asked about instructional strategies that are effective for dually identified students, Karen only spoke about "write, draw, visually demonstrate," which are three ways students can process information or show how they have mastered content (Individual Interview 2, p. 8). The only change Karen could name in her practice related to PALS was how to instruct reading with expression (i.e., proper intonation):

> This particular population of students—they had a lot of difficulty with punctuation. And so I found when I let them have a longer period of time with their reading partners that,

> because of the checklist, they were really paying close attention to expressiveness and punctuation. (Individual Interview 1, p. 2)

Although Karen stated that this lesson observation was about reading with expression, there was no evidence that she continued using the strategies. Karen also reported that she "was reluctant to use PALS" in the beginning because she thought it would mean less instructional time with her students (Individual Interview 1, p. 3). By the end of the intervention, however, Karen reported that PALS gave her more time to read with the students. According to the questionnaire, *implementing alternative teaching strategies* is an indicator of instructional strategies and Karen tried to implement PALS, an alternative curriculum, in her practice. These limited changes in Karen's practice to better support dually identified students were observed during coaching cycles and voiced during interviews.

Jessica. Jessica reported that her practice has changed due to the implementation of PALS and coaching cycles. As the content of the coaching cycles focused on PALS implementation, many of Jessica's reflections were about the PALS program itself. In her interview, she shared that the PALS gave structure to partner reading time, which was previously unstructured. When asked whether her teaching practice has changed due to coaching and PALS, Jessica shared:

> Definitely. This is a whole new structure to partner reading. Our partner reading was less structured before. It was like partner reading—elbow-to-elbow. When it's time to read independently in that structure, for any reason, then [students were positioned] back-to-back. We haven't had much professional development around partner reading in general. So, PALS gave me a structure and new activities that are engaging for the students. (Individual Interview 1, p. 3)

Jessica reported that since the coaching cycles related to PALS began, partner reading time has been "very structured" (Individual Interview 1, p. 7), and all students were clear about lesson objectives. In addition to having different physical configurations for various reading components, the students now completed different activities along with each configuration. Jessica found that "everything you need is right there" (Individual Interview 1, p. 7) with PALS. The structure allowed students to build more independence from the start. According to Jessica, the PALS teacher's guide provided support to her practice in setting routines, engaging with students, and asking questions.

Jessica also voiced that PALS has helped her to use more scaffolds in her practice. She reported that PALS is "clear and more accessible for students" (Individual Interview 2, p. 4). Jessica thinks PALS is "more intentional" in how to set up and teach partner reading than programs the school has used in the past, and that the materials are readily available (Individual Interview 2, p. 4). During lesson observations, Jessica had reading materials that were differentiated for students. She shared that PALS "already provides appropriate scaffolds" (Individual Interview 1, p. 3). I noted that all students had checklists to use as a support for partner reading, and Jessica reported that the checklist provided by PALS served as natural scaffolds for students with a timeline for the activity and sentence starters and reminders for each of the partner's roles. Her use of the checklists triggered conversation during the debrief meetings about how she could include other visual representations to support student learning. Based on those conversations, Jessica implemented a visual timetable so students could see the sequence of the PALS lesson.

During the second interview, Jessica voiced that she used several effective instructional strategies to support dually identified students. She identified useful strategies including

targeting vocabulary, strategic partnering, word banks, wait time, and signaling, which are all considered best practice for dually identified students. Several scaffolds were in place during lesson observations; one strategy that I observed repeatedly was signaling. Jessica would alert the child that she would be calling on him or her and would provide the child with a specific question to answer ahead of time. The questions could be specific for the student or as a preview to what she will ask the class as a whole. This strategy allowed many different students to be successful in answering the questions. The interview with the teacher and lesson observations support that Jessica now utilizes a variety of instructional strategies specific to her dually identified students.

Classroom management. The coaching cycles also provided the teachers the opportunity to reflect on their practice in regard to classroom management.

Karen. Karen explained that classroom management was a challenge because of a specific group of her current students and that it was not reflective of her as teacher. She believes that due to "years of poor classroom management," the students have developed a certain type of behavior that was not conducive to autonomous learning (Individual Interview 2, p. 12). Karen said that disruption by certain students interrupted instruction. She was unable to adequately assess each group's understanding and "prevents the teacher from being able to monitor errors" (Individual Interview 2, p. 13).

During lesson observations, students constantly walked around the classroom and called out to each other. Karen continued to teach the PALS lessons as these behaviors occurred. When asked how the lesson could have been improved during a debrief meeting, Karen stated that an extra person in the classroom would be helpful. She voiced her concern that the small group was having a hard time attending to the PALS lesson as the rest of the class was "acting up" (Debrief

Meeting 1). Karen frequently mentioned that an extra person in the classroom could help with overall classroom management: “An extra person in the classroom could manage the class while the teacher focuses on the small group who needs the extra support” (Individual Interview 2, p. 3). With an additional adult in the room, she believed that the rest of the class would not disrupt the small group learning. Although Karen self-reported that her classroom management teacher efficacy had grown, she often made statements that showed she did not feel that classroom management was an area within her control.

Jessica. I discussed classroom management with Jessica on occasion. Overall, I observed that Jessica had control of the classroom, and students were on task. Jessica shared that PALS is “very structured,” and it is easy to follow because there is “little room for confusion” (Individual Interview 1, p. 7). Jessica stated that the PALS script “included routines and repetition. It included ways to engage students” (Individual Interview 2, p. 1). During lesson observations, Jessica noticed desirable behaviors and would say, “I noticed that [child’s name] is sitting right next to their partner” (Observation 2). In her lessons, Jessica reviewed routines by asking questions such as, “Who reads first? Partner A or B?” (Lesson Observation 5).

During Debrief Meeting 3, Jessica reflected that she “didn’t realize the kids needed so much reminding of PALS structure.” She shared that she needed to be more aware of helping students to follow the PALS routine with “reminding or modeling beforehand.” Jessica also shared that she “should have anticipated” the need for reminding students of structure and needed to “keep that in mind for next time.” The coaching cycles and interviews revealed that Jessica seems to see herself as a teacher for whom classroom management is within her control.

Conclusions

The findings explore how teacher beliefs about special education might be related to self-efficacy in teaching dually identified students. Jessica felt a sense of responsibility to her dually identified students and was open to receiving feedback about expanding her knowledge of evidence-based practices. Conversely, Karen's beliefs about special education limited her role and practice in supporting dually identified students. The belief that the teacher holds about their roles and responsibilities with dually identified students is reflected by how they perceive the amount of impact they have on student learning. Teachers with a higher level of efficacy and who believed more in children's ability to be successful are more likely to spend more time and effort on their pedagogical practices (Shidler, 2009).

The participants viewed PALS-based coaching cycles as an intervention that improved their practice. Although Karen had limited participation, both teachers explained that their teaching practice did change due to engaging with PALS and coaching cycles as part of this study. The coaching cycles allowed each teacher to receive feedback on her teaching practice and a chance to act upon the feedback within a structured context such as PALS. Jessica shared how the feedback from the coaching cycles allowed her to set goals for herself as well focus on an area needing improvement in her practice. This finding demonstrates the importance of feedback in raising teacher self-efficacy and is in alignment with Bandura's (1977) theory of how social persuasion can raise self-efficacy.

The two participants had different experiences within this study. Jessica reported that the 1-day PALS training workshop prepared her to teach the program and that the coaching cycles were very supportive of her practice in using the program with dually identified students. Karen thought that the 1-day PALS training workshop could have been more interactive to foster learning and that there were outside barriers preventing her from teaching dually identified

students. Karen self-reported a sense of reluctance to implement PALS. She mentioned in her interviews that she felt the 1-day PALS training workshop was too rigid, and she did not feel like she could make mistakes. This sentiment was coupled by Karen sharing that she thought she was not supported in implementing PALS by her supervising coach or by administration. Karen's early statement about how PALS would take time away from her working with the students also seemed to contribute to her reluctance to implement PALS.

Even though the two teachers had somewhat different experiences, both teachers reported some degree of change regarding their instructional practice and self-efficacy. It is interesting to note that both teachers decided to resign from the current context at the end of the school year. Karen decided to move abroad and to teach at an international school, and Jessica decided to teach in a different charter school in the same city that serves a very different population of students.

Discussion

In this section, I examine how the findings align with prior research, limitations, and recommendations for practice and future research. Specifically, I look at how the findings connect with Bandura's theory of self-efficacy as well as the interconnected model of professional growth. Both theories suggest that the learner is active and that cognition, behavior, and the environment all impact each other in a non-linear learning process.

Bandura's Theory of Self-efficacy

As I discussed in Chapter 3, Bandura (1977) suggested four ways to increase task-specific self-efficacy: mastery experiences, vicarious experiences, social persuasion, and emotional arousal. Bandura's theory suggests that people learn through their own experiences and through observing the behavior and consequences of others. The data in this study provided

evidence that show factors such as social persuasion and mastery experience can influence teacher self-efficacy. The data did not show, however, how vicarious experiences and emotional arousal influence teacher self-efficacy.

In this study, social persuasion existed in the form of coaching cycles. Social persuasion occurs when a verbal reminder is given about skills that are being developed and by providing specific suggestions regarding those capabilities, such as with verbal feedback (Bandura, 1977). Feedback during coaching cycles is associated with better implementation of new strategies (Reinke et al., 2014). Participants in this study were given verbal feedback during coaching cycles, and they did indeed view verbal feedback as a supportive component of the coaching cycles. For example, Jessica voiced that she could become more proficient in using PALS because "pointing out what things went well brought my attention to things I should keep and continue to implement and the things I should reconsider and restructure for the students" (Individual Interview 2, p. 5). Karen was observed using new teaching strategies when implementing PALS after feedback was given. This finding aligns with previous research on how feedback given by coaches can be essential in the teachers' becoming proficient in using new instructional techniques (Cantrell & Hughes, 2008).

In contrast to social persuasion, mastery experiences refer to the direct encounters with the success one experiences due to their behavior (Bandura, 1977). The findings of this study suggest that mastery experiences did influence changes within the teachers. For example, Jessica was observed implementing new PALS-based instructional strategies, and she often commented her experience of success with PALS throughout her coaching cycles. For example, during Debrief Meeting 6, she said, "Those kids got it! They know what they are doing." In the debrief meeting, she stated that she felt successful in implementing PALS, which made her better at

teaching partner reading. Additionally, Jessica was observed implementing a PALS activity according to the checklist in her lesson and the students engaging with the PALS activity. This finding aligns with those of previous researchers showing mastery experience to be a powerful source of change (Tschannen-Moran et al., 1998).

Another finding aligns with previous research on how mastery of experience can support change in self-efficacy. During Karen's first lesson observation, student behavior was not redirected, and during the debrief, she appeared to be discouraged in implementing further PALS lessons. In Debrief Meeting 1, she reflected that she was "unsure if the class is ready" for PALS. Later in the year, once Karen had more control of classroom behaviors, she was able to implement PALS with fidelity and reflected that it felt "good to see the kids actually doing it" (Debrief Meeting 2). Due to positive student engagement, she thought that PALS was a worthwhile program and stated that she "would launch it within the first couple days of school [next year]" (Individual Interview 2, p. 11). In the last debrief meeting, Karen noted that it was "good to see the kids actually doing it [PALS]". Karen's words show that by experiencing success, she was more willing to implement PALS and to try new strategies to teach dually identified students. This finding is noteworthy because it aligns with the findings of Cantrell and Hughes (2008), who suggested that through coaching cycles, teachers can experience success and increase their self-efficacy.

The coaching cycles in this study provided the means by which teachers could receive feedback and experience success in teaching dually identify students by implementing PALS. Previous research has shown that coaching generally plays a role in changing teacher behavior (Abernathy-Dyer et al., 2013). In addition, structured coaching can be used to provide meaningful feedback, which then enables the teacher to experience mastery (Hopkins-

Thompson, 2000; Yost, 2002). By experiencing both mastery experience and social persuasion, coaching supports positive changes in teachers' self-efficacy.

Interconnected Model of Professional Growth

The interconnected model of professional growth (Clarke & Hollingsworth, 2002) connects with Bandura's (1986) theory of triadic reciprocity. The two theories align with the notion that learning is not a linear process but instead a process in which several domains interact with each other for learning to occur. The interconnected model of professional growth suggests that the learning process happens through teacher's reflection and enactments between the personal domain, the domain of practice, the domain of consequence, and the external domain (Clarke & Hollingsworth, 2002). In this study, the coaching cycles following the 1-day PALS training workshop was the external domain.

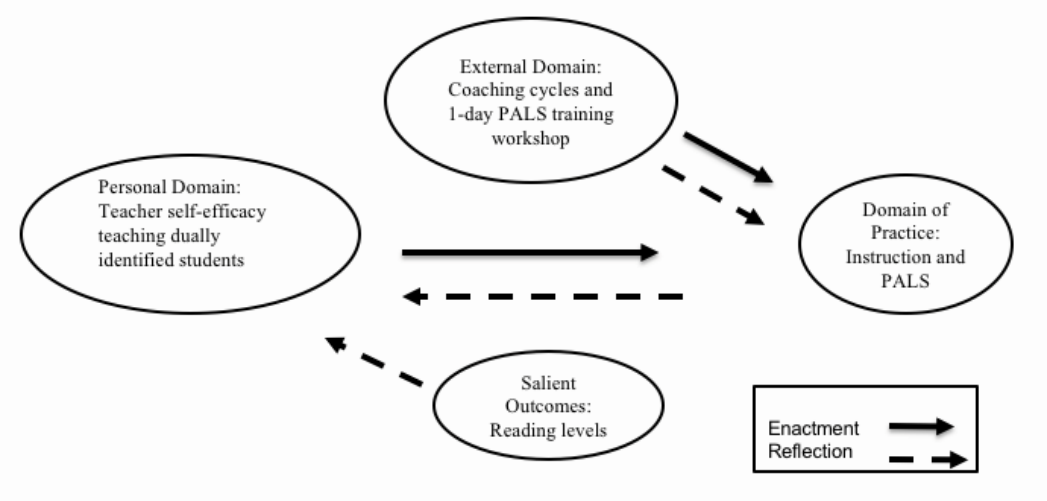

Figure 5.1 Adapted interconnected model of professional growth to show Karen's change (based on the interconnected model of professional growth by Clarke and Hollingsworth, 2002).

Karen. Figure 5.1 shows Karen's growth network related to teaching dually identified students. Karen's point of entry for teacher change was participation in the coaching cycles, or the external domain. Her participation enabled the enactment of PALS instruction, which is the

domain of practice. The debrief meetings and Karen's implementation of PALS, or domain of practice, then supported her reflection on her personal beliefs about dually identified students, which is an example of a change sequence with the personal domain. Her beliefs about dually identified students influenced how she enacted with her implementation of PALS. At the beginning of the intervention, Karen was more reluctant to implement PALS, and toward the end, she voiced she would have liked to have started sooner. Even though she did not reflect on student reading levels or salient outcomes, Karen did reflect that PALS supported students in reading with expression. Her reflection on how PALS influenced student reading with expression created a change sequence to her personal domain. There was, however, no evidence of reflection or enactment between the external and personal domain.

Overall, the findings demonstrated that Karen showed limited change. The coaching cycles (i.e., external domain) enabled Karen to reflect upon her teaching practice (i.e., domain of practice). The reflections allowed her and the coach to identify actionable steps to change her practice. The personal domain played a major role in Karen's learning process. Karen's teaching beliefs influenced her teaching practice, and the findings from the lesson observations demonstrated that Karen's beliefs about students in special education, classroom management, and her impact on teaching dually identified students were perceived to be somewhat out of her control. For example, Karen did not address or adjust her instruction when disruptive behaviors occurred. She stated that the best way for dually identified students to be included in the general education classroom was "to have two instructors in the room" (Individual Interview 2, p. 2). This finding shows that Karen's teacher self-efficacy may not be as high as her survey responses indicate. She states that another teacher should take some of the responsibility for supporting dually identified students, rather than her being solely responsible for their needs. This aligns

with previous findings indicating that teacher self-efficacy is linked with teacher's willingness to differentiate for students (Dixon et al., 2014). Although the external domain and domain of practice are connected through enactment, there was limited enactment by Karen as she only attended two of six coaching cycles. The domain of consequence played a limited role in Karen's learning process. There were limited data to show that reflection or enactment took place between the domain of consequence and other domains. Student reading levels indicated growth, but Karen did not make direct attribution to PALS or coaching. When asked directly about student progress, she did reflect that the students made some progress in reading expression. This shows that Karen displayed some, but limited, reflections about student outcomes. There was limited reflection between the domain of consequence and personal domain, which is evident in her beliefs about dually identified students during the interviews.

Jessica. Figure 5.2 shows Jessica's growth network related to teaching dually identified students. Her point of entry for teacher change was participation in the coaching cycles, or the external domain, and her participation enabled her to enact PALS instruction, which is the domain of practice. Jessica's beliefs about dually identified students created a change sequence to her domain of practice through both enactment and reflection. She acted on those personal beliefs by implementing PALS as much as possible, and then reflected how a researched-based program can support the learning of dually identified students during the debrief meeting. Also, there was both enactment and reflection between salient outcomes, or reading levels, and her domain of practice. Jessica showed enactment within the domain of practice by switching reading partners in the PALS lessons based on students' reading levels, which shows a change sequence to salient outcomes. Another change cycle was evidenced by her reflection on beliefs,

or personal domain, about dually identified students and how and why students' reading levels had changed.

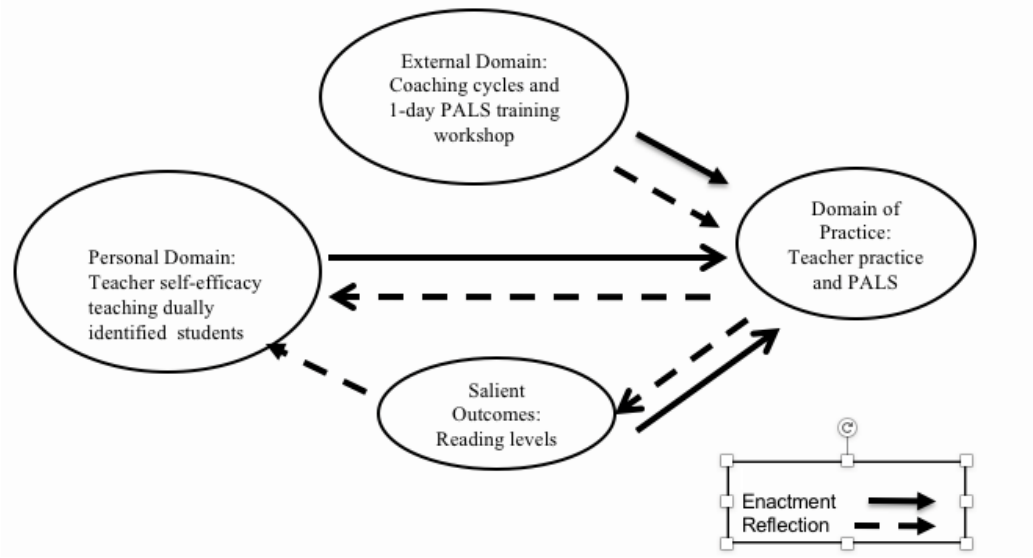

Figure 5.2. Adapted interconnected model of professional growth to show Jessica's change (based on the interconnected model of professional growth by Clarke and Hollingsworth, 2002).

The findings indicated that the intervention, or external domain, influenced changes in the other three domains for Jessica through reflection and enactment. During the coaching cycles, Jessica was prompted to reflect about her practice as a teacher; she would often continue to reflect upon her practice and lesson after the initial question was answered. The external domain (i.e., coaching cycles) supported Jessica in reflecting on her domain of practice (i.e., instruction). She also demonstrated enactment between the external domain and domain of practice by attending all coaching cycles and implementing PALS in her classroom.

Jessica also displayed reflection and enactment between her domain of practice and her personal domain. She reflected on her practice, which influenced her personal beliefs about special education and her teacher self-efficacy. Based on her reflections, Jessica made changes in her practice. For example, in one debrief meeting, she indicated that students were making

progress and partners needed to be reassigned. The changes within the domain of practice and personal domain are connected through reflection and enactment, which aligns with findings from previous studies on teacher learning (Clarke & Hollingsworth, 2002).

The domain of practice also connected with the domain of consequence (i.e., salient outcomes). Through implementing PALS, Jessica recognized that student reading levels increased. The reading data are important to note as salient outcomes are a crucial part of the interconnected model of professional growth (Clarke and Hollingsworth, 2002). The reading assessment data supports Jessica's views on student outcomes, as students did increase their reading levels. The perceived outcomes of students can influence a change in personal domain (Clarke & Hollingsworth, 2002).

In summary, both teachers engaged with the intervention differently and demonstrated varying degrees of teacher change. The learning process for each teacher was dissimilar as the act of reflection and enactment between the domains varied for each teacher. Jessica's change included her reflection and enactment between the domain of practice and the salient outcomes, while Karen did not reflect or enact between those two domains. The personal domain is another domain in which the participants showed some variation. Even though both teachers showed some reflection and enactment, Jessica demonstrated that she believes that she can impact all students, whereas Karen viewed that her impact was more dependent on external factors. Within the domain of practice, Jessica was more willing to try new strategies and expand her practice. This finding aligns with previous researchers' conclusions that teacher self-efficacy influences their willingness to try new teaching strategies for students in special education (Abernathy-Dyer at el., 2013; Dixon et al., 2014).

Also, another finding was that Jessica noted that students' reading levels were increasing, but Karen did not mention students' reading levels unless asked directly. Jessica made the connection between implementing PALS and increased student reading levels. and this was reflected in her beliefs about dually identified students. This finding aligns with previous research indicating that if teachers perceive that the new practices are linked to salient outcomes, then there could be a change in teacher beliefs (Clarke & Hollingsworth, 2002).

Even though the participants showed different degrees of shifts in practice and beliefs, shifts did occur for both teachers. The findings of this study show that teacher change occurred in areas of teaching practice and teacher self-efficacy through both reflection and enactment between the four domains, which aligns with previous research on teacher learning according to the interconnected model of professional growth (Clarke & Hollingsworth, 2002).

Limitations and Implications for Practice and Future Research

There are several limitations to the current study. The small population and resulting sample size are limitations. Originally, I designed this study to include all teachers from two grade levels. Of the eight teachers asked to participate, only two teachers were willing. One major limiting factor was a change in administration, which impacted the vision for the school's work plan for the year. The PALS program was no longer a priority. Additionally, the school administration requested that some teachers be excluded as potential participants as they were going to be asked to resign once new teachers were hired. In future research, the sample size should be expanded upon. Even though two participants are acceptable for a case study, future studies should have a larger sample size.

The variation in the fidelity of implementation of coaching cycles is also a limitation. In some instances, there was high fidelity and, in others, low. Both teachers attended the 1-day

PALS training workshop as planned. However, teacher attendance for coaching cycles varied greatly.

Karen completed two of the six coaching cycles. She attended five of the six pre-observation meetings. Throughout the study, Karen canceled or shortened the pre-observation meetings due to meetings with the principal about her job performance, meetings with another coach, and personal reasons. Jessica, on the other hand, attended each component of all six coaching cycles. She also could only implement parts of a full PALS lesson due to competing priorities messaged to her by the school. An implication for practice could be for school leaders to be aware of the workload for teachers and how too many demands may conflict with each other. During the lesson observations, I noted that fidelity to the PALS lesson structure was inconsistent. The teachers followed the steps for each observed PALS lesson activity (e.g., paraphrasing) with fidelity, but teachers only implemented certain activities within each PALS lesson due to schedule constraints, meaning the teachers did not implement all activities in one lesson as scripted by PALS.

Both teachers cited that there was not enough time to implement entire PALS lessons because the school placed many demands upon the teachers' time that took priority over PALS. In the first interview, Jessica stated, "There's a lot of things to think about at different times of the year that did take precedence over doing PALS" (Individual Interview 1, p. 6). Both teachers shared that administration communicated conflicting messages about what was a priority. Future studies should be conducted with the cooperation of the administration to support teachers' fidelity of implementation.

Another implication for practice is for schools to use data, such as student outcomes, more intentionally when supporting teacher practice. The findings of this study showed that

teacher change occurred when domain of practice and domain of consequence were connected through either enactment or reflection or both. It might have been beneficial to use student outcome data to drive coaching meetings and goal setting for teachers. Future research should include more extensive use of student data, such as comparing how teacher practice might change using student data intentionally during coaching cycles to guide instruction.

A consideration for future research could be the role that classroom behavior management plays in the fidelity of implementation of a study. Behavior management was one of the reasons that Karen did not participate with fidelity of implementation in the intervention. However, even with limited participation, Karen expressed that she would have implemented this intervention earlier as she saw value in it. Therefore, future studies could focus on how classroom behavior management plays a role in the fidelity of implementation in both the classroom and the coaching level to better understand teachers' willingness to try new teaching practices.

This study was conducted over a 12-week period, due to time constraints imposed upon me by school administration. Future research should occur over a longer period of time, such as an entire academic year. Also, future research should be conducted in different contexts such as a Spanish immersion class or a transitional bilingual class. The different models of bilingual education could provide additional, and possibly differing, perspectives on how the bilingual learning model can influence PALS interventions.

Further, I concluded that coaching cycles can help to enhance teachers' sense of self-efficacy in teaching dually identified students through providing feedback and enabling the teachers to experience mastery. A recommendation for practice is to include specific feedback during coaching cycles and to focus on enabling teachers to experience mastery in teaching

dually identified students. Future researchers could focus on what specific kinds of feedback, and how the feedback is given to teachers, will best support teacher change. The two participants engaged quite differently with the same intervention, but more research is needed to understand what enables a teacher to accept and actively engage with the 1-day PALS training workshop and coaching being provided. Schools would likely benefit by developing a climate and culture where teachers feel supported by school leaders and instructional coaches. The findings of this study showed that both teachers felt that there was a lack of administrative support. Additionally, schools could benefit from supporting teachers in challenging and cultivating teachers' beliefs toward dually identified students.

Implication for Self

This study has many personal implications for me in my role as a coach as I continue to learn and grow in my own practice. As an educator who is working with teachers-in-training, this study has prompted me to rethink what learning looks like from a teacher's perspective. The interconnected model of professional growth (Clark & Hollingsworth, 2002) suggests that each teacher has his or her own learning pathways, which implies that an instructional coach needs to be aware of what each teacher's individual learning pathway has been and be intentional in targeting each domain for each teacher to maximize change.

In using the interconnected model of professional growth as a framework for my coaching, one domain that I need to focus on more is the domain of consequence. As I reflected on the findings of this study, I realized that I do not intentionally use student outcomes. Rather, I rely on teachers to use student outcomes as part of their own professional reflection. This is reflected in the two diagrams. Jessica's diagram showed both reflection and enactment between the salient outcomes and the personal domain and the domain of practice. However, Karen's

diagram showed only reflection between the salient outcomes and personal domain. Before setting goals with teachers, the teacher and I should review student outcomes in a deliberate manner to link evidence of student learning (i.e., salient outcomes) to reflection or enactment in other domains.

A second implication for my work is that I need to be more intentional in targeting the personal domain as an area of potential growth. Throughout this study, I focused more on the domain of practice, as my past training as a coach focused on observable teacher behavior. Reflecting on the findings of this study and the interconnected model of professional growth (Clark & Hollingsworth, 2002), I now realize the importance of the personal domain on teacher change. Even though personal beliefs cannot be observed, they should not be ignored.

During the debrief meetings in this study, the reflection questions focused on teacher practice rather than teacher beliefs. Karen's and Jessica's diagrams show that there is a lack of interaction between the external and personal domain. The lack of interaction shows me that, as part of my practice, I should ask teachers to reflect on their own beliefs as part of debrief meetings so that teacher growth in the personal domain can be part of their learning.

Appendix A

Participant Consent Form: Needs Assessment

Staff Informed Consent Form

Title: Dually Identified Student Outcomes and the Role of General Education Teachers
Principal Investigator: Dr. Christine Eith, Johns Hopkins University School of Education

Student Investigator: Peling Li, Doctoral Student, Johns Hopkins University School of Education
Date: March 28, 2015

PURPOSE OF RESEARCH STUDY:
The purpose of this research study is to determine whether a professional development series to support teachers teaching students with disabilities and language needs in an inclusive classroom will raise teacher efficacy and how it will impact student outcomes in the subject area of reading.

We anticipate that approximately 40 teachers, four instructional coaches, and two members of the leadership (Executive Director and Principal) will participate.

PROCEDURES:
There will be several components for this study:

1. There will be three surveys distributed electronically online to all lead teachers and teaching fellows at Mundo Verde Public Charter School.
   - One survey will be a teacher efficacy survey designed by Tschannen-Moran & Woolfolk Hoy (2001).
   - One will be about their views on support and professional development regarding students with disabilities and language needs.
   - The last survey collects demographics on the teaching staff.
2. There will be one survey for the instructional coaches. The survey asks for their views on support and professional development regarding students with disabilities and language needs.
3. An interview will be conducted with the Executive Director and the Principal separately. The interview will be recorded.
4. Existing student data in reading will be collected.

Time required: This data will be collected over one week's time in April 2015.

RISKS/DISCOMFORTS:
There are no anticipated risks to the teaching staff.

BENEFITS:
Potential benefits are an increased understanding of how to provide teacher support and professional development to raise teacher efficacy for teaching students with disabilities and language needs. It is believed that higher teacher efficacy is linked to better student outcomes.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:
Your participation in this study is entirely voluntary. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

You can stop participation in the study at any time, without any penalty or loss of benefits. If you want to stop participating, please contact Peling Li via phone or email: (202) 549-2075 or at pli19@jhu.edu.

CONFIDENTIALITY:
Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the Office for Human Research Protections. (All of these people are required to keep your identity and the identify of your child confidential.) Otherwise, records that identify you or your child will be available only to people working on the study, unless you give permission for other people to see the records.

No identifiable information will be included in any reports of the research published or provided to school administration. A participant number will be assigned to all surveys and the student's achievement scores.

Surveys will be collected in either electronic or paper format. Survey data completed electronically will be collected. If the participant is unable to complete the surveys electronically, paper copies will be provided. In both electronic and paper format, these data will not include identifiable information.

All research data, including paper surveys and recordings, will be kept in a locked office. Electronic data will be stored on the student PI's computer, which is password protected. Any original tapes or electronic files will be erased and paper documents shredded, 10 years after collection.

COMPENSATION:
You will not receive any payment or other compensation for participating in this study.

IF YOU HAVE QUESTIONS OR CONCERNS:
You and your child can ask questions about this research study at any time by contacting Peling Li via phone or email: (202) 549-2075, pli19@jhu.edu.

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University: (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:
Your signature below means that you understand the information in this consent form. Your signature also means that you agree to participate in the study.

_____

Name

_____

Signature **Date**

_____

Signature of Person Obtaining Consent **Date**
(Investigator or HIRB-Approved Designee)

Appendix B

Teacher Sense of Efficacy Scale

Adapted from Tschannen-Moran, M., & Woolfolk Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. Teaching and Teacher Education, 17(7), 783–805. doi:10.1016/S0742051X(01)00036-1

Teacher Sense of Efficacy Scale

Thank you for filling out this survey. This survey should take about 15- 20 minutes. Please be completely honest with your responses.

* Required

What is your gender? *

- ◯ Male
- ◯ Female

What is your ethnicity? *

- ◯ White
- ◯ Hispanic/Latino
- ◯ Black/African America
- ◯ Asian/Pacific Islander
- ◯ Asian/Pacific Islander

What is the highest level of education you have attained? *

- ◯ High School Diploma
- ◯ Bachelors Degree
- ◯ Masters Degree
- ◯ Doctoral Degree

What is your age?

- ◯ 20-30
- ◯ 31-40
- ◯ 41-50
- ◯ 50 or older

What teacher certifications do you hold?

How many years of teaching experience do you have?

How many years of special education teaching experience do you have?

What special education training have you received outside MVPCS? For example previous employer professional development, mentoring, formal qualifications

How much can you do to get through to the most difficult student? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	◯	◯	◯	◯	◯	◯	◯	◯	◯	A Great Deal

How much can you do to help your students think critically? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9 -A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	◯	◯	◯	◯	◯	◯	◯	◯	◯	A Great Deal

How much can you do to control disruptive behavior in the classroom? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	◯	◯	◯	◯	◯	◯	◯	◯	◯	A Great Deal

How much can you do to motivate students who show low interest in school work? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	◯	◯	◯	◯	◯	◯	◯	◯	◯	A Great Deal

To what extent can you make your expectations clear about student behavior? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you do to get students to believe they can do well in school work? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How well can you respond to difficult questions from your students? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How well can you establish routines to keep activities running smoothly? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you do to help your students value learning? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you gauge student comprehension of what you have taught? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

To what extent can you craft good questions for your students? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you do to foster student creativity? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you do to get children to follow classroom rules? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you do to improve the understanding of a student who is failing? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you do to calm a student who is disruptive or noisy? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How well can you establish a classroom management system with each group of students? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How well can you respond to defiant students? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you assist families in helping their children do well in school? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How well can you implement alternative strategies in your classroom? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How well can you provide appropriate challenges for very capable students? *

How well can you provide appropriate challenges for very capable students?

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you do to adjust your lessons to the proper level for individual students? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How much can you use a variety of assessment strategies? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

How well can you keep a few problem students from ruining an entire lesson? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

To what extent can you provide an alternative explanation or example when students are confused? *

1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite A Bit, 9- A Great Deal

	1	2	3	4	5	6	7	8	9	
Nothing	○	○	○	○	○	○	○	○	○	A Great Deal

Appendix C

Demographic Survey

Demographic Questions

* Required

What is your gender? *

- ○ Male
- ○ Female
- ○ Other: _____

What is your ethnicity? *

- ○ White
- ○ Hispanic/Latino
- ○ Black/African American
- ○ Asian/Pacific Islander
- ○ Native American or Indian American
- ○ Other: _____

What is the highest level of education you have attained? *

- ○ High School Diploma
- ○ Bachelors Degree
- ○ Masters Degree
- ○ Doctoral Degree
- ○ Professional Degree (law, med)

What languages do speak fluently? *

Choose all that apply.

- [ ] English
- [ ] Spanish
- [ ] Other:

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15 Demographic Questions

What is your age? *

- ( ) 20- 25
- ( ) 25- 30
- ( ) 30-35
- ( ) 35-40
- ( ) 40-45
- ( ) 45-50
- ( ) 50-55
- ( ) 55 or older

What teacher certifications do you hold? *

How many years of teaching experience do you have? *

How many years of inclusive classroom teaching experience do you have? *

What special education training have you received outside MVPCS? For example previous employer professional development, mentoring, formal qualifications *

If yes, please state amount and when.

What language acquisition training have you received outside MVPCS? For example previous employer professional development, mentoring, formal qualifications *

If yes, please state amount and when

Submit

Appendix D

Teacher Survey

Teacher Survey

* Required

How do you rate yourself in terms of teaching students with language acquisition needs? *

1 2 3 4 5

Ineffective ○ ○ ○ ○ ○ Effective

How do you rate yourself in terms of teaching students with special education needs? *

1 2 3 4 5

Ineffective ○ ○ ○ ○ ○ Effective

How has your ability changed terms of teaching students with special education and language acquisition needs since you started working at MVPCS? *

Please note 3 indicates no change in ability

1 2 3 4 5

Gotten worse ○ ○ ○ ○ ○ Gotten better

How much support does MVPCS provide you towards development of your ability to teach students with special education and language acquisition needs? *

1 2 3 4 5

No support ○ ○ ○ ○ ○ Sufficient support

How do you rate the quality of the support MVPCS provides you towards development of your ability to teach students with special education and language acquisition

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Teacher Survey

needs? *

	1	2	3	4	5	
Poor	○	○	○	○	○	Good

How much impact has the support you have received from MVPCS had on your ability to teach with special education and language acquisition needs? *

	1	2	3	4	5	
No impact	○	○	○	○	○	Significant impact

In terms of future support, please choose the three supports you would most value in order to improve your ability to teach students with special education and language acquisition needs? *

Please only choose 3

- ○ Evaluation
- ○ Professional Development series
- ○ More collaboration with specialist
- ○ Coaching
- ○ Professional Learning Communities
- ○ Other:

Please choose the three content areas where you would most value professional development support in order to improve your ability to teach students with special needs and language acquisition needs? *

Please only choose 3

- [ ] Language acquisition and development
- [ ] Child development
- [ ] Evidence based interventions
- [ ] Understanding around disabilities
- [ ] Differentiation
- [ ] Culturally responsive teaching
- [ ] Other:

What kind of support is needed to help you implement any future professional development training to your teaching? *

Appendix E

Instructional Coach Survey

Instructional Coach Survey

* Required

How much support does MVPCS provide teachers towards development of their ability to teach students with special education and language acquisition needs? *

1 2 3 4 5

No support ○ ○ ○ ○ ○ Sufficient support

How do you rate the quality of the support MVPCS provides teachers towards development of their ability to teach students with special education and language acquisition needs? *

1 2 3 4 5

Poor ○ ○ ○ ○ ○ Good

How much impact has the support teachers have received from MVPCS had on their ability to teach with special education and language acquisition needs? *

1 2 3 4 5

No impact ○ ○ ○ ○ ○ Significant impact

In terms of future support, please choose the three supports you would most value in order to improve MVPCS teachers' ability to teach students with special education and language acquisition needs? *

Please only choose 3

- ○ Professional Learning Communities
- ○ Coaching
- ○ Professional Development series

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- ○ Evaluation
- ○ More collaboration with specialist
- ○ Other: _____

Please choose the three content areas of professional development you consider would most improve MVPCS teachers' ability to teach students with special needs and language acquisition needs? *

Please only choose 3

- ☐ Language acquisition and development
- ☐ Child development
- ☐ Evidence based interventions
- ☐ Understanding around disabilities
- ☐ Differentiation
- ☐ Culturally responsive teaching
- ☐ Other: _____

What kind of support is needed to help MVPCS teachers implement any future professional development training to their teaching? *

Submit

Appendix F

Semistructured Interview Questions

1. What does an inclusive environment mean in this school?
2. How does the school prepare general education teachers for dually identified students?
3. How does the school support general education teachers for dually identified students?

Appendix G

Student Reading Levels and Teacher Sense of Efficacy

Table G1

Student Reading Levels (in English)

	General Education Students		Dually Identified Students	
Reading Level	Frequency	Cumulative Percent (%)	Frequency	Cumulative Percent (%)
PREA	3	1.4	2	11.1
A	1	1.8	3	27.8
B	2	2.8	1	33.3
C	12	8.3	2	44.4
D	5	10.6	4	66.7
E	6	13.4	1	72.2
F	6	16.1	1	77.8
G	5	18.4	2	88.9
H	4	20.3	0	
I	11	25.3	0	
J	10	30.0	0	
K	5	32.3	0	
L	16	39.6	0	
M	17	47.5	0	
N	13	53.5	0	
O	10	58.1	0	
P	6	60.8	0	
Q	16	68.2	0	
no data	69	100	2	

Note. Reading levels are ascending in proficiency.

Table G2

Student Reading Levels (in Spanish)

	General Education Students		Dually Identified Students	
Reading Level	Frequency	Cumulative Percent (%)	Frequency	Cumulative Percent (%)
A	20	9.2	2	11.1
1	56	35.0	3	27.8
2	21	44.7	1	33.3
3-4	9	48.8	2	44.4
6	21	58.5	4	66.7
8	9	62.7	1	72.2
10	11	67.7	1	77.8
12	7	71.0	2	88.9
14	4	72.8	0	
16	9	77.0	0	
18	10	81.6	0	
20	6	84.3	0	
24	7	87.6	0	
28	7	90.8	0	
30	6	93.5	0	
34	4	95.4	0	
38	4	97.2	0	
no data	6	0	2	100

Note. Reading levels are ascending in proficiency. The Spanish reading levels are denoted as numbers and correspond to English reading levels, which are denoted as letters.

Table G3

Efficacy in Student Engagement

Student Engagement	*N*	*M*	*SD*
How much can you do to motivate students who show low interest in schoolwork?	28	3.85	.80
How much can you do to get students to believe they can do well in schoolwork?	28	7.53	1.13
How much can you do to help your students value learning?	28	7.28	1.04
How much can you assist families in helping their children do well in school?	28	6.82	1.36
How much can you do to get through to the most difficult student?	28	6.60	1.83
How much can you do to help your students think critically?	28	4.17	.722
How much can you do to foster student creativity?	28	6.92	1.04
How much can you do to improve the understanding of a student who is failing?	28	6.67	1.41
How much can you assist families in helping their children do well in school?	28	6.82	1.36

Table G4

Efficacy in Instructional Strategies

Instructional Strategies	*N*	*M*	*SD*
How well can you respond to difficult questions from your students?	28	7.60	.91
How much can you gauge student comprehension of what you have taught?	28	7.25	.96
To what extent can you craft good questions for your students?	28	7.00	1.18
How much can you do to adjust your lessons to the proper level for individual students?	28	6.85	1.29
How much can you do to get through to the most difficult student?	28	6.78	.95
To what extent can you provide an alternative explanation or example when students are confused?	28	7.46	1.13
How well can you implement alternative strategies in your classroom?	28	6.96	1.14

How well can you provide appropriate challenges for very capable students?	28	7.03	1.23

Table G5

Efficacy in Classroom Management

Classroom Management	*N*	*M*	*SD*
How much can you do to control disruptive behavior in the classroom?	28	7.00	1.36
To what extent can you make your expectations clear about student behavior?	28	7.75	1.10
How well can you establish routines to keep activities running smoothly?	28	7.53	1.31
How much can you do to get children to follow classroom rules?	28	7.53	1.03
How well can you establish a classroom management system with each group of students?	28	7.28	1.27
How much can you do to calm a student who is disruptive or noisy?	28	6.96	1.47
How well can you keep a few problem students from ruining an entire lesson?	28	7.07	1.38
How well can you respond to defiant students?	28	7.00	1.58

Appendix H

Needs Assessment Data

Table H1

Descriptive Statistics of Teacher Survey on Support

		Teaching Language Acquisition	Teaching_SPED	Ability Change	Amount of Support	Quality of Support
N	Valid	28	28	28	28	28
	Missing	0	0	0	0	0
Mean		3.5357	3.0357	3.7500	2.7857	2.8929
Median		4.0000	3.0000	4.0000	3.0000	3.0000
Mode		4.00	3.00	4.00	3.00	3.00
Std. Deviation		.83808	.74447	1.00462	1.19744	1.31485

Table H2

Frequency for Future Support

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	PD	6	21.4	21.4	21.4
	Coaching	10	35.7	35.7	57.1
	PLC	3	10.7	10.7	67.9
	Collaborate with specialist	8	28.6	28.6	96.4
	Other	1	3.6	3.6	100
	Total	28	100	100	

Note: PD = professional development and PLC = professional learning community.

Table H3

Frequency for Future Professional Development Content

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Language Acquisition	16	57.1	57.1	57.1
	Evidence-Based Practice	7	25.0	25.0	82.1
	Differentiation	4	14.3	14.3	96.4
	Other	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

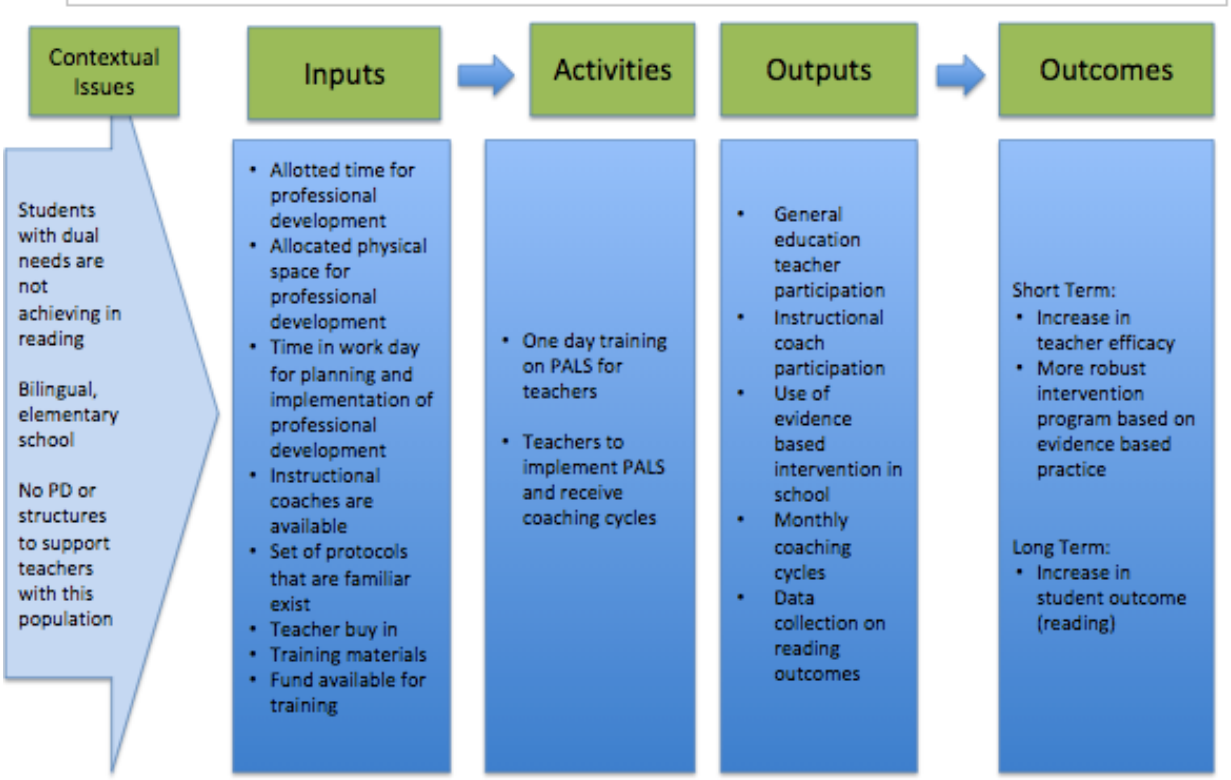
Table H4

Frequency for Future Implementation Support

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Collaboration	7	25.0	25.0	25.0
	Coaching	9	32.1	32.1	57.1
	Time	4	14.3	14.3	71.4
	Direct Input	4	14.3	14.3	85.7
	PD	3	10.7	10.7	96.4
	Understanding Child	1	3.6	3.6	100
	Total	28	100	100	

Appendix I

Logic Model



Appendix J

Participant Consent Form: Intervention

Johns Hopkins University

Homewood Institutional Review Board (HIRB)

Informed Consent Form	
Title:	Professional Development, General Education Teachers' Efficacy, and the Learning Outcomes of Dually Identified Students
Principal Investigator:	**Dr. Sherri Prosser, Johns Hopkins University School of Education**
Student Investigator:	**Peling Li, Doctoral Candidate, Johns Hopkins University School of Education**
Date:	October 16, 2016

PURPOSE OF RESEARCH STUDY:

- The purpose of this research study is to examine the effect of professional development, including coaching and professional learning community (in person and virtual), and teacher efficacy for elementary students with disabilities who are learning a second language. The study will also look at the fidelity of classroom implementation of the study's peer assisted learning strategies.

PROCEDURES:

- All second- through fifth- grade teachers are invited to participate in coaching and professional learning community meetings to support their work with peer assisted learning strategies.
- As a participant, you will be expected to participate for 12 weeks. There will be six coaching sessions and at least one professional learning community per month, up to a maximum of five. Both coaching sessions and professional learning communities will be conducted in person and virtually. The observations will be video recorded. The coaching sessions will occur every other week, and the teacher collaboration will occur once at least once month, up to a maximum of five. The coaching sessions will include a pre-planning session, observation, and a debrief session. During the professional learning community, we will follow a protocol when discussing any dilemmas you may encounter with teaching peer assisted learning strategies. You will be asked to take a survey before and after each session. You will also be asked to participate in two interviews that will each take approximately 45 to 60 minutes after the study. The coaching sessions will last about 90 minutes and the professional learning community will be about 45 minutes long. If you do not choose to participate in the study, you are still eligible to participate in the coaching and the professional learning community.

RISKS/DISCOMFORTS:

- The risks associated with participation in this study are no greater than those you will encounter in daily professional life.

- By participating in professional learning community or focus groups, you will be sharing with the researcher and your peers how you feel about your abilities to teach students with disabilities who are learning a second language.

BENEFITS:

- The potential benefits that you may expect include extra support in implementing a widely recognized reading intervention called peer assisted learning strategies (PALS). This study may also benefit the school by leading to a better understanding of how coaching and professional learning communities following a professional workshop could be related to teacher efficacy.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

- Your participation in this study is entirely voluntary. You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled. If you do not choose to participate in the study, you are still eligible to participate in the coaching and the professional learning community.
- If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please write a formal letter or email to state withdrawal from the study.

CIRCUMSTANCES THAT COULD LEAD US TO END YOUR PARTICIPATION:

- We may stop your participation if you are no longer employed in your present teaching position.

ALTERNATIVES TO PARTICIPATION:

- The study provides access to training not currently provided by the school. However, coaching in other areas of teaching is available, and you may participate in the coaching for PALS even if you do not choose to participate in the study.

CONFIDENTIALITY:

- Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.
- The study records will be created, stored, and maintained in such a way that protects confidential information. All participants will be assigned a participant code and pseudonym. No names will be used. All documents and spreadsheets will be saved on a password-protected laptop and will only be accessible to authorized researchers.

- There will be no financial costs to the participants. The only cost will be asking participants for their time.

COMPENSATION:

- You will not receive any payment or other compensation for participating in this study.

IF YOU HAVE QUESTIONS OR CONCERNS:

- You can ask questions about this research study now or at any time during the study by talking to the researcher working with you. Your researcher is Peling Li. You can Peling Li at (202) 549-2075, or you can email Peling Li at pli19@jhu.edu. If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES
WHAT YOUR SIGNATURE MEANS:

- Your signature below means that you understand the information in this consent form. Your signature also means that you agree to participate in the study.
- By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.

Participant's Signature **Date**

Signature of Person Obtaining Consent **Date**

(Investigator or HIRB Approved Designee)

Appendix K

Coaching Cycle Field Notes

Observations:

Time	Observed Behaviors	Thoughts

Coaching Session Note Catcher:

Pre-Planning Notes:

Debrief Notes:

Mastery Experience	Verbal Persuasion
Vicarious Experience	Emotional Arousal

Appendix L

PALS Fidelity Checklist

Adapted from The IRIS Center. (2011). *PALS: A reading strategy for grades 2–6.* Retrieved from http://iris.peabody.vanderbilt.edu/module/pals26/

PALS 2–6 Observation Form

Date: _____ **Start time:** _____ **Stop time:** _____

Teacher: _____ **Observer:** _____

Introduction

_____ 1. Introduce PALS Session
_____ 2. Have students transition to pairs quickly and quietly
_____ 3. Have system in place for students to quickly and easily access materials

Partner Reading

_____ 4. Implement for 10 minutes
_____ 5. Follow script
_____ 6. Have students switch jobs after 5 minutes
_____ 7. Monitor students

Retell

_____ 8. Implement for 2 minutes
_____ 9. Follow script
_____ 10. Monitor students

Paragraph Shrinking

_____ 11. Implement for 10 minutes
_____ 12. Follow script
_____ 13. Have students switch jobs after 5 minutes
_____ 14. Monitor students

Prediction Relay

_____ 15. Implement for 10 minutes
_____ 16. Follow script
_____ 17. Have students switch jobs after 5 minutes
_____ 18. Monitor students

Wrap Up

_____ 19. Have students put away materials in 2 minutes or less

20.	How well did the teacher implemet the PALS Instructional Activities?	**1** Not well	**2** Average	**3** Very well
21.	How well did the teacher monitor students?	**1** Not well	**2** Average	**3** Very well

Appendix M

Interview One

Script for interview:

Hello, my name is _____. As you know, you are part of a study to explore your work this year in the professional learning communities and Peer Assisted Leaning Strategies or PALS, including the combination of PALS training, coaching, and professional learning communities. Thank you! It's really great that you've agreed to help with this study.

Today's interview might take up to 30 minutes, so thank you for your time. I want to remind you that I will be audio recording the interview. Is that okay?

Please be open and honest with your responses. Do you have any questions before we begin?

The first question is a general one about your implementation of the Peer Assisted Learning Strategies (PALS) intervention. Please think about PALS and how you teach.

1. How many times a week do you use PALS with your students?
2. How long is each session?
3. Do you deviate from the scripted lesson? If so, please explain. Tell me how you monitor the student learning in your lessons?

The next questions are specific to the PALS professional development with coaching and the professional learning communities that you participated in over the past 12 weeks.

1. Tell me about your experience with coaching and with the professional learning communities?
2. What changes in teaching practices, if any, have you made because of your involvement in the intervention? Teaching practices can be defined as how you approach instruction and strategies used to help students learn. Please give an example that supports your response.

Note to interviewer: If the participant responds that his or her teaching practices have changed because of involvement in the professional development, ask this follow-up question:

- What was the role of the intervention in changing your teaching practices? Please give an example that supports your response.

The next questions are related to teacher efficacy. Teacher efficacy is defined as the extent to which teachers believe they can affect student learning.

1. How, if at all, has your confidence regarding teaching dually identified students changed as a result of your involvement in the intervention? Please give an example or two that supports your response.
2. How, if at all, has your sense of responsibility changed in supporting dually identified students to reach their goals in reading? Please give an example or two that supports your response.
3. How, if at all, have your expectations changed about the reading achievement of dually identified students? Please give an example or two that support your response.

The final questions are related to the academic achievement of dually identified students.

1. How, if at all, did the intervention contribute to the development of dually identified students' reading skills?
2. What is your role in supporting the development of dually identified students' reading proficiency?

Appendix N

Interview Two

Semistructured Interview Questions

Script for interview:

Hello. As you know, you are part of a study to explore your work this year in the professional learning communities and Peer Assisted Leaning Strategies, or PALS, including the combination of PALS training and coaching. I would like to ask some follow-up questions from our first interview. It will take approximately 45–60 minutes.

Please be open and honest with your responses. Do you have any questions before we begin?

First, I am going to ask you reflect on the PALS professional development and implementing PALS.

1. What are some specific supports you encountered in implementing PALS?
2. What are some hindrances you encountered in implementing PALS?
3. What stood out as helpful or not helpful for you during the coaching process?
4. If you could build your own professional development program in evidence-based practice, what would it look like?

Now I am going to ask you about your beliefs and feelings about PALS and dually identified students.

I am going to ask you questions about dually identified students:

1. How much can one teacher impact student learning outcomes? Can they change? What was helpful? What was not helpful?
2. How much do you think you can change the students' learning outcomes? Has this changed since the start of the intervention?

3. What are some things that can support teacher efficacy?
4. If you could design your own professional development about about dually identified students, what would it look like?

I am going to ask about your general beliefs on dually identified students and inclusion.

1. Have your beliefs changed since the start of the intervention?
2. What is your definition of LRE and inclusion?
3. Tell me how you view inclusion in the context of least restrictive environment?
4. How did you view your role within inclusion at Mundo Verde PCS?
5. How did you view the role of the special education teacher in MVPCS?
6. What are some strategies that work for ELLs and special education students' needs?

Now I want to ask you about your practices related to dually identified students.

1. To you, what are effective strategies that support dually identified students?
2. What strategies were the most helpful for you?
3. How would you have implemented PALS if you had stayed in your current context, or how might you implement PALS in your new context?

Appendix O

Summary Matrix

Research Questions	Constructs	Measures	Data Analysis
1. How do teachers of dually identified students experience coaching cycles following a 1-day professional development workshop?	Teacher perceptions of coaching cycles	Field notes, interviews, researcher's journal	Thematic analysis
1A. To what degree do the teachers participate in coaching cycles following a 1-day professional development workshop?			
2. How do teachers describe changes in their self-efficacy after coaching cycles following a 1-day professional development workshop?	Teacher efficacy for teaching reading to dually identified students	Teacher Sense of Efficacy Scale	Descriptive statistics
		Field notes, teacher interviews	Thematic analysis
2A. What is the relationship between teacher self-efficacy and dually identified students' reading levels?	Teacher efficacy for teaching reading to dually identified students	Teacher Sense of Efficacy Scale	Descriptive statistics
	Student reading levels	Fountas and Pinnell, Evaluación del Desarrollo de la Lectura 2	Descriptive statistics
3. How do teachers describe changes in their practice after coaching cycles following a 1-day professional development workshop?	Teacher perceptions of change in practice	Field notes, teacher interviews, researcher's journal	Thematic analysis

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Biography

Peling is a clinical faculty member at Johns Hopkins University where she teaches graduate courses in special education, including the coaching of novice teachers through JHU's partner Urban Teachers. Before joining Johns Hopkins and Urban Teachers, Peling was the Director of Special Education at a public charter school in Washington DC with responsibility for establishing a robust special education program and keeping compliance to special education law. Prior to moving to Washington, Peling lived and worked in both London and New York. In London, she worked as borough wide expert special education practitioner, an in-school special education teacher in a turn-around public elementary school and, finally, as an assistant principal. New York City saw the beginning of Peling's teaching career and it holds a special place in her heart. She taught first grade in a New York Public Schools following a period working as an Applied Behavior Analysis Therapist with Early Intervention. Peling graduated from New York University in 2004 with a bachelors in Elementary & Special Education and Psychology. She then graduated from Teachers College in 2006 with a master's degree in International Education Development. She earned her Education Doctorate degree from Johns Hopkins in 2019.